DOCUMENT RESUME

ED 218 736 EA 014 747

AUTHOR	Cates, Carolyn S.; And Others
TITLE	An Exploration of Interorganizational Arrangements That Support School Improvement.
INSTITUTION	Far West Lab. for Educational Research and Development, San Francisco, Calif.
SPONS AGENCY	National Inst. of Education (ED), Washington, DC.
PUB DATE	Nov 81
CONTRACT	400-80-0103
NOTE	194p.; For related documents, see EA 014 745-746 and EA 014 748-749.
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Classification; Community Surveys; *Cooperative Programs; *Educational Cooperation; *Educational Improvement; Educational Legislation; Elementary Secondary Education; *Government School Relationship; Institutional Characteristics; *Institutional Cooperation; Legal Responsibility; School Districts; Tables (Data)
IDENTIFIERS	*California (San Francisco Bay Area); *Legal Status

ABSTRACT

Researchers surveyed 13 counties in the Greater San Francisco Bay Area (California) to identify and classify educational agencies' cooperative, interorganizational arrangements (IOAs) for school improvement and to describe the characteristics of different types of IOAs. Data were collected from interviews, directories, and documents. Five IOA characteristics were studied: their history, environmental context, structure, operations, and outputs. The survey identified 103 IOAs in the Bay Area and revealed that 67 percent of the 409 educational agencies in the region, including all 231 school districts, were involved in one or more IOAs. The researchers developed a classification system based on two dimensions: the IOA's legal status (whether mandated by outside agencies, enabled or sponsored by outside agencies, or "freestanding," meaning supported chiefly by member organizations), and the school improvement's legal status (mandated, enabled, or freestanding). Analysis based on this classification system showed, among other things, that most IOAs relied on external requirements or resources and that IOA characteristics include both tight and loose coupling. The findings bear a number of implications for research and policy on educational collaboration and school improvement. An appendix provides extensive descriptions of the characteristics of types of IOAs. (Author/RW)

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ED218736

AN EXPLORATION OF INTERORGANIZATIONAL ARRANGEMENTS THAT SUPPORT SCHOOL IMPROVEMENT

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November 1981

EA 014 747

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This project has been supported with federal funds from the National Institute of Education, Department of Education, under Contract No. 400-80-0103. The contents of this publication do not necessarily reflect the views or policies of the Department of Education and the National Institute of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government or the Far West Laboratory.

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ABSTRACT

This study was conceived in response to current interest on the part of educational policymakers at all levels in promoting formal collaborative arrangements among educational agencies as a means to support substantive improvement efforts. At the same time, there exists a marked scarcity of information about existing collaborative arrangements in education; this factor further served to inspire the present study. Three major objectives of the study were: 1) to identify the variety of collaborative arrangements in education in one region of California; 2) to develop a system for classifying the arrangements into predominant patterns or types which illuminate the policy-relevant characteristics in the arrangements; and 3) to develop descriptions of the basic features of each type of arrangement.

Thirteen counties known as the Greater San Francisco Bay Area were chosen as the study area. Arrangements were identified through interviews with staff in the California State Department of Education and in the 13 county offices of education, and through collection and review of documents such as directories of school improvement programs, dissemination networks, and consortia. Descriptive data about the arrangements were gathered through field and telephone interviews with arrangement coordinators and review of arrangement documents and records supplied by respondents. Interview respondents were asked to describe their arrangements in terms of five dimensions: history; environmental context; structure; operations; and outputs.

A nine-cell classification system was developed from two dimensions derived from the history and context of the arrangements: the legal status of the improvement effort (mandated, enabled, freestanding); and the legal status of the arrangement itself (mandated, enabled, freestanding).

Several unexpected findings emerged. First was the large number of arrangements identified--103. Second was the frequency with which educational organizations participated in arrangements: the range of frequency was between one and 18 arrangements; 67 percent of the 409 educational agencies identified participated in two or more. Third, all of the 231 Bay Area school districts were engaged in at least one arrangement, and 90 percent were in two or more. These findings indicate much more frequent formal connection among educational organizations than has been previously assumed or identified. However, when the arrangements were arrayed across seven of the nine subclasses, the majority (86%) was found to rely heavily on state or federal requirements and/or resources as the catalyst for their initiation and continuation. This suggests that the frequency and strength of the connections may diminish in proportion to the strength and frequency of external catalysts.

For research, the implications are to identify: 1) the critical, minimum external incentives necessary to encourage collaboration in the face of almost certain declining external resources; and 2) the

essential features and incentives for collaboration without external motivation. For policymakers who wish to promote collaboration, the implications are: 1) to focus on building collaboration requirements into externally supported programs; and 2) to identify and provide positive sanctions for exemplary freestanding collaborative efforts.

ACKNOWLEDGEMENTS

Many individuals have made important contributions to this study. Chief among them were those we interviewed. They were unfailingly generous with their time and information, and patient with out frequent follow-up inquiries. We received valuable guidance from our NIE project officer, Ward Mason, and from the advisors for this study, who also reviewed its several drafts: William Baker, Paul Berman, Ann Lieberman, George Masker, and John Patterson. In addition, many insightful suggestions for improvements were provided by colleagues who reviewed the final draft: Henry Brickell, Steven Bossert, Jerry Fletcher, Robert Herriot, and Brian Rowan. Finally, we have been assisted by the unflagging patience and professionalism of our editor, Mark Malkas, and our support staff, Judith Haglund, Paul Halley, and Ursula Hoffman.

EXECUTIVE SUMMARY

In the United States, public education is a local function, a state responsibility, and a concern of the federal government. Consequently, legislative, administrative, and judicial agencies, as well as educational agencies, professional associations, and public interest groups at all levels have an interest in the public schools. Among other things, this interest includes provision of general and categorical financial support; promulgation of laws, regulations, and orders; and provision of information, materials, technical assistance, and other forms of guidance or support. While the focus of much of this effort is on "maintenance" of schools, a small but important portion of the effort is concerned with "school improvement," that is, with efforts directed toward changing the structure, functions, curriculum content, staff capabilities, decision making participation, or other aspects of schools in ways that may make them more responsive, effective, efficient, or equitable

This study represents a portion of a larger effort, supported by the Research and Educational Practice Unit of the National Institute of Education, to develop a more comprehensive understanding of how various types of educational organizations relate to one another in accomplishing school improvement projects.

The purpose of the study is to explore, map, and describe formal dissemination and school improvement linkages among educational organizations, and to develop descriptive/analytic frameworks for description and analysis of interorganizational arrangements.

The immediate objectives of this study were:

- To identify within a sizable geographic area the variety of interorganizational arrangements that support school improvement efforts.
- To identify, describe, and analyze examples of predominant types of interorganizational arrangements in terms of their history, context, structure, operations, and outcomes.
- To examine the nature and extent of key factors that influence the establishment and continuation of effective interorganizational arrangements.
- To identify and assess present and potential strategies for establishing and continuing effective interorganizational arrangements.

Thirteen counties identified by the California State Department of Education as the Greater San Francisco Bay Area were chosen as the study area. The study area contains a population approaching six million persons; it includes 231 public school districts with approximately two thousand schools and one million pupils.

Interorganizational arrangements were identified through interviews with staff in the California State Department of Education and in the 13 County Offices of Education, and through collection and review of documents such as directories of school improvement programs, dissemination networks, and consortia. Descriptive data about the arrangements were gathered through field and telephone interviews with arrangement coordinators and review of documents and records supplied by respondents. Respondents were asked to describe their arrangements in terms of five dimensions: history; environmental context; structure or organizations; operations or interaction processes; outputs or activities.

A nine-cell classification system was developed from two factors derived from the history and context of the arrangements: the legal status of the improvement effort (mandated, enabled, freestanding); the legal status of the arrangement itself (mandated, enabled, freestanding). Several unexpected findings emerged. First was the large number of arrangements identified--103. Second was the frequency with which educational organizations participated in arrangements: the range of frequency was between one and 18 arrangements; 67% of the 409 educational agencies identified participated in two or more arrangements. Third, all of the 231 Bay Area school districts were engaged in at least one arrangement, and 90% were in two or more. These findings indicate much more frequent formal connection among educational organizations than has been previously assumed or identified.

When the 103 arrangements were classified, no arrangements were found for two of the subclasses: a) mandated arrangements supporting a freestanding school improvement effort and b) enabled arrangements supporting a freestanding improvement effort. For mandated and enabled arrangements, over three-quarters of the arrangements fell into the subclasses that supported the opposite class of improvement effort. That is, most mandated arrangements supported enabled improvement efforts, and most enabled arrangements supported mandated improvement efforts. Over half of the 103 arrangements belonged to one of the four subclasses in which there was joint external influence, mandated or enabled, on both the arrangement itself and the school improvement effort the arrangement supported. Arrangements based on mandate or enablement of the arrangement itself or of the improvement effort they supported accounted for 86 percent of all arrangements. Only 14 percent of the arrangements were freestanding arrangements supporting freestanding improvement effort. These findings strongly suggest that some form of external stimulus significantly affects the formation of the great majority of all these school improvement focused interorganizational arrangements.

Organizations participating in the 103 arrangement totaled 485. Sixteen percent were non-educational agencies, each of which participated in only one arrangement. The remaining 84 percent of the organizations were grouped in seven organizational types: school districts, county offices of education, institutions of higher education, research and development agencies, state departments of education, "other" educational agencies, and organizational arrangements per se (that participated as members of yet other arrangements).

School districts and county offices are the most frequent participants. School districts participated in 90 of the 103 arrangements, distributed throughout all seven subclasses of arrangements. Moreover, all of the arrangements in five of the seven subclasses had at least one participating school district. County offices are represented in 59 arrangements. They participate in all of the freestanding arrangements supporting freestanding improvement efforts and in most of the arrangements supporting mandated improvement efforts.

Of the other organizational types, only institutions of higher education are represented in as many as five of the seven subclasses of arrangements. However, they appear in only 26 of the 103 arrangements and are represented most heavily in mandated arrangements supporting enabled improvement efforts. R&D agencies are represented only in arrangements supporting enabled improvement efforts.

Among the 103 arrangements, 20 different combinations of types of organizations were found. The combination of school districts and county offices account for almost 40 percent of the arrangements. Nearly three fourths of all arrangements are made up of one of these four combinations: 1) school districts only, 2) school districts and county offices,

3) school districts and institutions of higher education, and 4) school districts and R&D agencies. Mandated arrangements tend to involve school districts working with R&D agencies, institutions of higher education, or county offices. Most of the enabled arrangements are composed of either school districts and county offices or school districts alone. The most frequent combination of organizations in freestanding arrangements consist of school districts and county offices.

Most of the interorganizational arrangements have fewer than ten member organizations: Almost half have only two to four members, and nearly one quarter have five to nine members. Most agencies collaborating in an arrangement are located either in the same county or in contiguous counties.

This census of interorganizational arrangements supporting school improvement efforts in the Greater San Francisco Bay Area suggests several points that may be of interest to policy makers.

1. Participation in such arrangements seems to be far more prevalent than might be expected. Every one of the 231 school districts participate in two or more arrangements, and 12 of the 13 county offices participate in five or more arrangements.

2. Educational agencies collaborate in formal interorganizational arrangements most often when there is some external stimulus, via mandate or enablement, that affects the arrangement itself, the improvement effort, or both.

3. Participation by type of organization is profoundly affected by the status of the school improvement effort that is supported by the arrangement. School districts and county offices tend to be virtually the only members of mandated arrangements supporting mandated improvements.

But when a mandated arrangement supports an enabled improvement effort, there is typically a broad range of organizations that may participate.

4. Educational organizations form arrangements with other agencies that are geographically close. Usually members of the arrangement are located in the same or in contiguous counties. Perhaps partially for this reason, most arrangements tend to have fewer than ten members.

The study provides much detailed information concerning the history, context, structure, operation, and outputs of arrangements typifying each of the seven classes of arrangements identified in the Greater San Francisco Bay Area.

The study closes with a discussion of implications for research and theory, and implications for policy.

Research implications are discussed in terms of five broad questions:

- Under what circumstances are formal collaborative arrangements most appropriate to support improvement efforts?
- What, if any, are the critical distinctions between externally supported and freestanding collaborative efforts in areas other than the legal or externally supported status of the improvement project and the arrangement?
- What actors contribute to the useful continuation of formal collaborative efforts when external support or requirements are reduced or eliminated?
- What are the "natural" variations in coupling within and among educational organizations engaged in collaborative improvement efforts?
- What factors contribute to the tendency of some organizations to repeatedly lead or join in the formation of collaborative arrangements as opportunities or requirements arise or change?

Policy implications are considered in terms of three issues:

- What are the possible consequences of the proliferation of collaborative arrangements?
- What factors may contribute to the marked differences in combinations of organizational types that support the different classes of arrangements?
- How can state and federal policymakers continue to promote collaborative efforts given: a) the heavy reliance on external resources for IOAs; and b) the almost certain reduction in state and federal resources for education over the next few years?

I. INTRODUCTION

Background*

The Dissemination and Utilization Studies Component of the Educational Dissemination Studies Program (EDSP) conducts research designed to provide new knowledge about how improvement-oriented change occurs in schools and how policies and administrative and technical procedures in state, intermediate, and local education agencies support these changes.

As part of this research, the present study is an exploration of the formal collaborative arrangements through which educational organizations work together and with other types of organizations to support school improvement efforts. The purpose of the study is to explore and map formal dissemination and school improvement linkages among educational organizations, and to develop conceptual and descriptive/analytic frameworks for description and analysis of interorganizational arrangements. Thus, two overall, long-range objectives guided the study:

- To collect and analyze information about organizational arrangements and personal linkages within and between educational organizations that serve to communicate knowledge and needs for knowledge pertaining to school improvement.
- To develop a conceptual framework and appropriate methodology for providing policy and planning "intelligence" about activities, structures, norms, reward systems, etc. in key types of educational agencies and configurations of agencies that will improve understanding of present and potential capabilities to perform school improvement-oriented dissemination and technical assistance activities.

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* Detailed background is presented in the EDSP 1979 Technical Proposal (Hood and Cates, 1979a, pp. 33-50), in EDSP Quarterly Reports (Hood and Cates, 1979b; Hood, Cates, and McKibbin, 1979c, 1980a, 1980b), and in Cates, McKibbin, and Hart (1980).

However, the exploratory nature of the study suggested the following more immediate and more feasible objectives:

- To identify the variety of interorganizational arrangements that support school improvement efforts.
- To identify, describe, and analyze examples of predominant types of interorganizational arrangements in terms of their history, context, structure, operations, and outcomes.
- To examine the nature and extent of key factors that influence the establishment and continuation of effective interorganizational arrangements.
- To identify and assess present and potential strategies for establishing and continuing effective interorganizational arrangements.

We selected this focus for the study after review of previous EDSP studies* and discussions with the EDSP advisory panel and staff in the Research and Educational Practice unit of the National Institute of Education (NIE) indicated two areas of concern such a study might address. First, at all levels of educational agencies, there is a growing interest in and participation in collaborative efforts both 1) to avoid unnecessary duplication of effort in improvement support activities and 2) to extend or multiply the limited resources available to provide improvement support. The same studies and discussions also revealed a significant lack of conceptual, descriptive, and analytic information about formal interorganizational arrangements (IOAs) in education that would be helpful to sponsors or participants either in planning and designing arrangements or in carrying out the arrangements. Second, Hood (1978a, 1978b) in particular, pointed to the examination of linkages among organizations participating in IOAs as one means of identifying and assessing patterns of dissemination capacity within a state. This study is designed to be responsive to these concerns by providing policymakers and participants with a first level of relevant descriptive information.

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* Butler and Paisley, 1978; Cates, 1979; Emrick and Peterson, 1978; Hood, 1978a, 1978b, 1979a; Hood and Cates, 1978; Hood and Chow, 1978; Latto and Clark, 1978; Paul, 1978b; Pritchard, 1978.

LOGICAL STRUCTURE

Although the procedures to be employed in the study will be presented in the following section, several elements that provide the foundation for the study require separate explication. These elements include: the policy orientation of the study; the definition and limitations of selected key terms; and the choice of method for conducting the study and presenting its results.

Policy Orientation

The study is shaped by concerns for the information needs of policymakers and planners who might promote collaborative arrangements among educational agencies as a means of supporting substantive improvement efforts. The findings are expected to have direct or indirect applicability in formulating or implementing policy decisions to promote collaborative support mechanisms.

Definitions and Limitations

Interorganizational Arrangement. An interorganizational arrangement (IOA) is defined as a formal collaborative arrangement of some enduring significance between or among two or more permanent organizational entities. The term "interorganizational arrangement" is used to distinguish the focus and unit of analysis of this study from those associated with other frequently used terms. For example, although Stern (1979) and Benson (1975) have used "interorganizational network" to refer to organizational units and linkages between them, "network" is also commonly applied to relations or linkages between individuals or groups outside the context of organizations (e.g., Miles, 1978; Sarason, et al., 1977). The term "organizational set" (Evan, 1966) is defined as those organizations significant to the functioning of a focal organization and with which the focal organization frequently interacts. The concepts of this definition are at once too broad and too narrow. The notion of the "set" is too broad in that it can include most of the organizations with which a focal organization interacts and does not differentiate among particular arrangements (or boundaries of arrangements) in which the focal organization may participate. It is too narrow in that interpretations of interactions are usually oriented to their implications for the focal organization rather than for the structure and interaction of the IOA itself. The terms "interorganizational field" (Warren, 1975) and "interorganizational collectivity" (Van de Ven, et al., 1975) are likewise too broad by virtue of the range and number of organizations included in the "field" to be studied. However, the unit of analysis of the field or collectivity is parallel to the emphasis of this study: namely, the collectivity or IOA as a single unit.

Formal collaborative arrangement refers to an official, regularized agreement to "do something together." The emphasis on collaboration eliminates arrangements, however formal, which can be characterized primarily as purchase agreements for materials, supplies, services.

Some enduring significance is specified to distinguish the arrangements to be examined from those that are periodic or one-time, shortterm efforts.

Permanent organizational entities emphasizes that organizations, rather than individuals or social groups, are participants in the arrangement. In addition, the term "organizational entity" acknowledges the possibility, even the likelihood, that although the arrangement officially may be between the larger organizations (e.g., a local education agency and an R&D laboratory), the interaction and implementation of the arrangement may rest primarily with subunits acting as official representatives of their respective organizations (e.g., the staff development unit in a local education agency and a specific project in a research and development laboratory).

School Improvement Efforts. The arrangements to be examined are further limited by specifying that they be for the purpose of exchange or delivery of knowledge and/or other resources in support of school improvement efforts. This specification is intended to clarify the boundaries of the arrangement and emphazise that the analysis is aimed at what Benson (1975), Aldrich (1979), and Stern (1979) have called the level of "action sets" as subsystems of organizations that interact for explicit purposes.

The delimitation in this study is consistent with the general boundaries set for the Educational Dissemination Studies Program as a whole. The focus is on the practice improvement areas of elementary and secondary instruction and curriculum. This excludes post-secondary and continuing education. It also excludes from primary consideration many important non-instructional aspects of educational practice (e.g., finance, facilities, transportation, professional negotiations), which may be supported by IOAs. However, we have adopted a broad view of governmental levels and areas of education that can bear directly on instructional practice improvement. Hence, specific federal or state legislation or financial incentives designed to foster practice improvement, state-supported or mandated school improvement programs, and local community, school board, or administrative efforts bearing directly on instructional practice improvement are included in this circumscribed area of interest.

Choice of Study Method and Presentation of Results

Given the basic lack of both descriptive and analytic information about interorganizational collaborative arrangements in the field of education, the choice of an appropriate method for gathering, analyzing, and presenting information was problematic. After considering several possible approaches, three related "products" were selected for the focus of the study: a census of arrangements; a system for classifying the arrangements into predominant patterns or types; and descriptions of each pattern of arrangement. Although the term "census" is used only in the first element, the concept of a population census and the information it can provide underlies all three study products.

Census of Arrangements. The basic feature of a census is an enumeration of inhabitants with details about their essential characteristics. In a population census, the essential characteristics include age, sex, marital status, occupation, income, educational level, etc. The census of arrangements might include characteristics such as number and type of member organizations, age of arrangements, substantive improvement focus, major activities conducted, type and amount of resources contributed by or exchanged among members, etc. Like a population census, some individuals may be missed, but the final tally indicates, at least approximately, the general size of the population. Furthermore, the data about characteristics provide a basis for describing both the general character of the population as a whole and the variance within the population in terms of the essential characteristics.

Classification System. In order for data about the number and characteristics of highly diverse interorganizational arrangements to be useful for informing policy decisions, it seemed desirable to create a classification system by which the arrangements could be organized to reflect patterns of similarities and differences among the variety of individual arrangements. The classification system for this study met two criteria. First, as in most classification systems, the objects in each category should look alike in readily definable ways, and also be clearly distinguishable from objects in other categories. Specifically, each arrangement can be placed in one of the three major categories for two characteristics and subsequently in one of the nine subgroups formed by the cross-classification of the two characteristics. Second, the characteristics by which the categories are organized should be relevant to policy interests. The characteristics on which this classification system is based--1) the legal status of the arrangement and 2) the legal status of the improvement effort supported by the arrangement--provide two major ways in which policy may affect the arrangement. For each characteristic, three categories are distinguished: mandated, enabled, or freestanding. The mandated and the enabled categories reflect the two primary strategies available to policymakers for encouraging collaborative arrangements. These categories allow for examination of and comparison of arrangements associated with each strategy. In addition, the third major category--freestanding--provides for some comparisons between IOAs or improvement efforts that are externally supported by policy strategies and IOAs that occur without external support along one or both dimensions.

Descriptions. The next part of the study presents a description of each major category of arrangement and of the subcategories of arrangements. The description is not of a particular arrangement identified in the census, but is a composite picture of the core characteristics of the arrangements found in each category. In addition, significant variations among arrangements within each category are illustrated from study data about individual arrangements and from secondary source descriptions.

In the earliest stages of the study, we developed a five-dimensional framework for describing and analyzing individual arrangements. We have maintained these descriptive/analytic guidelines for describing the basic features of the several types of IOAs. The five dimensions (derived from Stern, 1979) are: the historical development of the IOA; the environmental context of the arrangement; the present structural characteristics; the processes or operations of the IOA; and the outputs of the arrangement in terms of the relationships of member organizations and the improvement effort supported by the arrangement. For each of the five dimensions, two sets of characteristics can be described. In one set are the characteristics of the primary unit of analysis in this study, the interorganizational arrangements themselves. These are referred to as relational properties. In general these are concerned with the linkage mechanisms among IOA members in terms of the exchange between organizations and/or in terms of the structure and context of the linkage mechanisms themselves.* In the other set are the characteristics associated with the secondary unit of analysis in this study, the organizations or subunits participating in the IOA. These are referred to as the comparative properties: i.e., the variety of attributes of each member organization which are then compared with the attributes of other IOA members.** Given the focus on breadth rather than depth in this study, the descriptions concentrate primarily on the relational properties of the arrangements themselves; however, the descriptions also include information about the comparative properties of participating organizations whenever possible. Figure 1 shows the organization of the framework.

PROCEDURES

Population

The population of educational IOAs is unknown. Consequently, a random or representative sample could not be drawn from some sampling frame. Therefore, a major task in this study was to build a sampling frame by identifying as many IOAs as possible within a small geographic area and to use those arrangements as a population base for developing and describing a classification system. Presented in the following subsection are the considerations which influenced the selection of the geographic area. The procedures for identifying IOAs within this area are described in the data collection subsection.

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* The relational properties are drawn primarily from Marret (1971) and Stern (1979).

** The comparative properties are drawn primarily from Van de Van, et al. (1975).

FIGURE 1

IOA ANALYTIC FRAMEWORK

DIMENSIONS	UNITS OF ANALYSIS	
	Interorganizational Arrangements (Relational Properties)	Member Organizations (Comparative Properties) Organization i -- Organization N
HISTORY	Circumstances/events that led to IOA.	Prior participation in IOA.
CONTEXT	Resource Availability: number and types of resource sources external to member organization. Cooperative Environment (General): emphasis/support for collaboration external to IOA member organizations.	Number of Resources Sources: number of sources from which a member can obtain necessary resources Cooperative Environment (Members): incentives/disincentives for membership in IOA; emphasis/support for collaboration within member organizations
STRUCTURE	Formalization: degree of official sanction or agreement given to exchange by parties. Intensity (Extent of Member Participation): size of resource investment required. Reciprocity (Extent of Mutual Agreement About): bases and conditions of exchange. Standardization: extent to which units and procedures for exchange are fixed or standardized. Structure or types of coordinating mechanisms. Degree of Coupling: levels at which IOA linkages occur; multiplexity of ties among IOA members.	Homogeneity: structural similarity of member organizations. Domain Consensus: degree of agrement or dispute about each organization's specific goals; extent to which member organizations' goals overlap; compatibility of member organizations' goals, reference orientations, philosophy. Resource Distribution: type and amount held by each member; type and amount needed by each member. Size of Network: number of organizations in IOA. Overlap in Membership: number of actors representing multiple organizations in IOA. Resource Contribution: proportional kind provided by each member.
OPERATIONS	Formalization: extent of exchange coordination by an intermediary. Intensity: frequency of interaction among members. Reciprocity: directions of exchange. Context (of Linkage Mechanism): circumstances under which mechanisms are employed.	Homogeneity: functional similarity of member organizations. Domain Consensus: compatibility of functions undertaken to implement goals. Awareness of Other Parties: degree of knowledge or ignoracne of goals, services, and resources of other member organizations. Stability: degree of turnover of IOA members; length of time organizations are members of IOA.
OUTPUTS	Results of IOA: number and types of direct outputs to members and clients.	Results of IOA: number and types of indirect outcomes for members and clients.

The Study Area

The population base for this study is all the collaborative arrangements meeting the study definition that were identified in the California region referred to as the Greater Bay Area. There are 13 counties in this area: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.* Figure 2 shows the location of counties in this area in relation to the other counties in California. Selection of this area was influenced by three factors.

First, in the absence of actual data or even good estimations about the population of educational IOAs, the rationale was to identify a geographic area that included at least some variety in the general demographic, socioeconomic, and educational characteristics. The assumption was that the variety in these general characteristics would more likely yield variety in the educational organizations and educational IOAs that could be identified in the area. Although the study area is not statistically representative of the nation as a whole, it does reflect substantial social, political, economic, and educational diversity. For example, it includes urban, suburban, and rural areas; and large ranges of school district size and wealth.

Second, the regional interests of EDSP and the Far West Laboratory made it desirable to concentrate data collection in the Laboratory's three-state region as one vehicle for mapping the needs and resources

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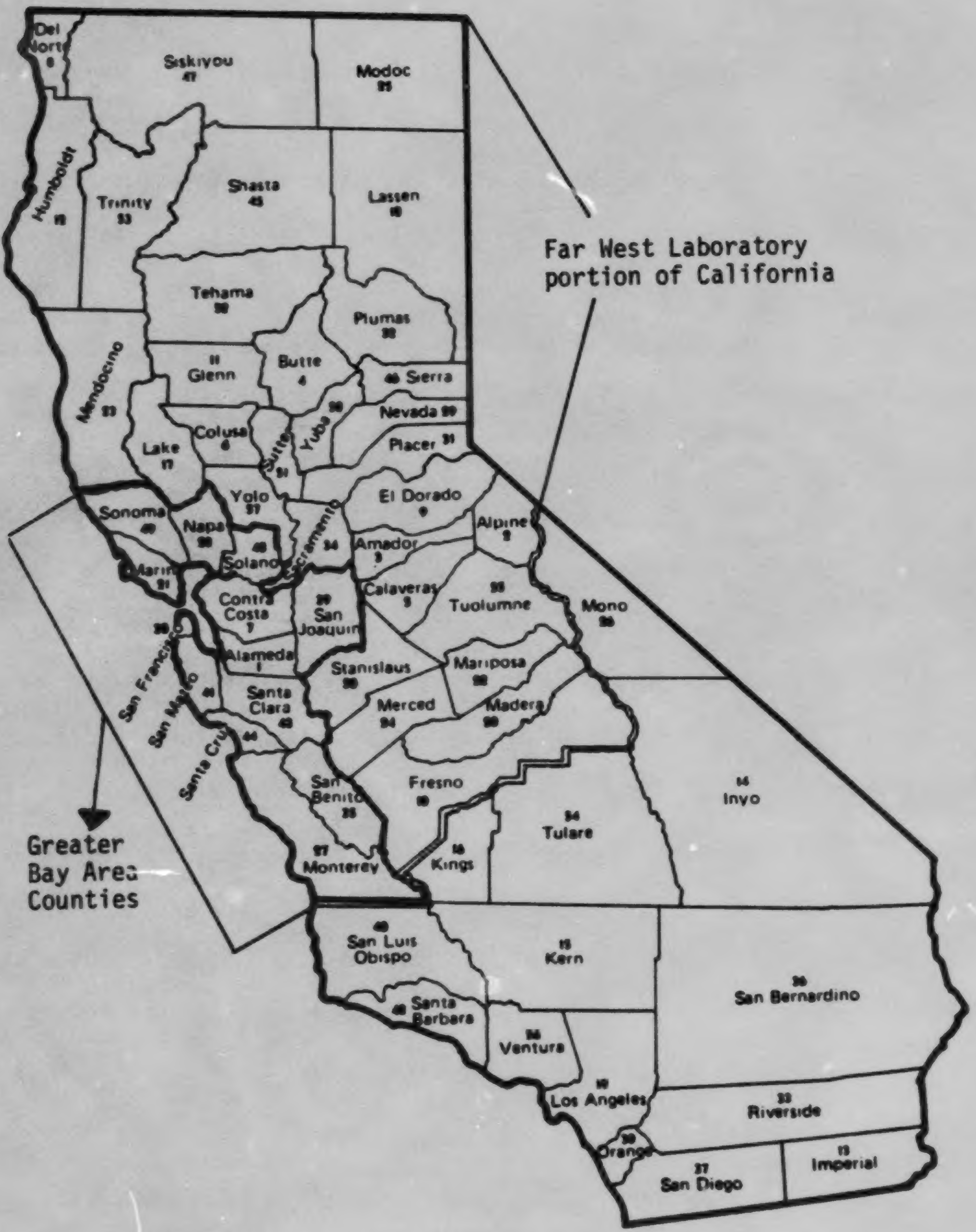
* There are many possible combinations of counties that might be considered as members of the Greater Bay Area. However, this particular group of 13 counties is recognized by the California State Department of Education as Area V.

FIGURE 2

THE 13 COUNTY STUDY AREA



Far West Laboratory portion of California

Greater Bay Area Counties

of the region. The study area includes over half of the total student enrollment in the FWL region.*

Third, the geographic boundaries of the area are within a two-hundred-mile radius of the Laboratory which meant that the project could be conducted within the constraints of staff time and fiscal resources.

Data Collection

Data collection activities included identifying and then gathering descriptive data about all identified arrangements in the study area. Table 1 summarizes the data collection procedures which are described below.

Preliminary Identification. This activity began with the collection and review of secondary source lists of dissemination and school improvement programs, networks, resources, etc., that were judged likely to include interorganizational arrangements in the study area. Examples of such lists are: Dissemination Networks (Far West Laboratory, 1978) and Selected California Staff Development Programs and Centers (CSDE, 1979). In addition, field and telephone interviews were conducted with individuals who, by virtue of their positions and/or research activities, were considered knowledgeable observers of dissemination and school improvement activities in the study area in order to obtain referrals to additional arrangements. Examples of knowledgeable observers are: program staff in the California State Department of Education, consultants in the County Offices of Education in the study area, and Far West Laboratory and other R&D agency staff working in fieldbased projects in the area.

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* The FWL region includes the northern portion of California identified in Figure 1, all of Utah, and all of Nevada but Clark County.

TABLE 1

DATA COLLECTION SUMMARY

ARRANGEMENT CENSUS	DATA SOURCE	COLLECTION STRATEGY	DATE
1. Preliminary identification	California State Department of Education staff	F&TI*	Jan-Feb 1980
	County Offices of Education staff	F&TI	Jan-Feb 1980
	Directories of school improvement practice	DC&R**	Jan-Feb 1980
	Directories of dissemination networks, consortia, etc.	DC&R	Jan-Feb 1980
	Arrangement record data	Supplied at time of interviews and DC&R	Jan-Feb 1980
2. Descriptions of individual arrangements	Key contacts for arrangements	F&TI	Mar-Sept 1980
	Representatives of organizational members Arrangement record data	Supplied at time of interviews and DC&R	Mar-Sept 1980

* F&TI = Field and Telephone Interviews
** DC&R = Document Collection and Review

Descriptive Data. Descriptive data about arrangements were gathered in field and/or telephone interviews with the key contact person for each arrangement and, wherever possible, other representatives of member organizations. The interviews themselves had three foci: gathering data about the arrangement with which the respondent was associated; soliciting referrals to other representatives of member organizations; and soliciting referrals to additional arrangements and respondents. As additional arrangements were identified, the procedures for scheduling interviews were repeated.

A standardized interview protocol was not used. However, a checklist of topics was employed. Respondents were asked to describe the characteristics of the arrangement in terms of the five dimensions to be used for describing the IOA categories: history, environmental context, structure or organization, operations or interaction processes, and outputs or activities. These dimensions provided a reasonably natural conceptual and narrative framework for the respondents. Our experience has been that these five dimensions were commonly understood so that little explanation was required about the information being sought. In addition, data about IOA characteristics of interest in this study could be extracted from information about these dimensions without unreasonable difficulty. For example, data about resource characteristics can be elicited under history (e.g., what types and amounts of resources were needed to establish the arrangement); context (e.g., what resources are presently provided by a non-member agency); structure (e.g., what size of resource investment is required from members for continuing the arrangement); operations (e.g., whether the delivery or exchange of resources is reciprocal or unilateral).

Respondents also were asked to provide documentary data about their own arrangement. Examples of documentary data include: proposals, reports, and evaluations of the arrangement; organizational charts for the arrangement and member organizations; bylaws and other operational guidelines for the arrangement and member organizations.

We conducted 59 field interviews and gathered data on each of 103 collaborative arrangements that met the definition and limitations of the study. Brief summaries of the essential characteristics of each IOA were prepared and, when necessary, follow-up telephone calls were made to fill in or clarify interview notes and record data.

Analysis

There were three data analysis activities: classifying individual arrangements; enumerating the arrangements by categories; and describing each category of arrangements. The method used for these activities was logical analysis of data sources.

Classification. The task was to divide the individual arrangements into types or categories that have systematic relationships based on characteristics that are relevant to concerns of educational policy-makers. In the absence of an existing classification scheme, this task first required the development of a policy-relevant classification system.

According to Tiryakian (1968), a typological classification is "one in which the fundamental categories of ordering, the types, are inductively arrived at rather than formally deduced a priori." This means that the basic procedure was to sort the arrangements (as represented by the summaries) into "natural" or "look-alike" groups. Although the primary task was the identification of the major or first-level categories, attention was also given to identifying at least one level of subunits within each major category.

Three procedural requirements were set for establishing the categories. First, the choice of categories must be such that all the arrangements can be classified in one of the major categories. Second, the basis for assigning arrangements to categories should be relatively unambiguous and easily explained. Third, the categories should be fundamental to the purposes of the applied policy orientation of the study. A number of trial classification schemes were examined; first by sorting the arrangements into look-alike categories; then by reviewing the categories against the requirements. Finally, a rather simple but effective classification system was found. It is described in Section II. The 103 interorganizational arrangements were classified and enumerated by these classification categories.

Descriptions. The purpose of the descriptions is to provide a sense of the major characteristics of arrangements falling in each major category rather than to depict the attributes and "behavior" of every individual arrangement within each category. Thus, the primary focus of descriptions is on the exemplifying characteristics of each major category. Each description will be a composite picture of the category rather than a description of specific representative or typical arrangements. The descriptions are based on study data on all arrangements in each category. Significant variations among subgroups within each major category are also illustrated in a similar manner.

II. CLASSIFICATION SYSTEM

The classification system is based on two dimensions which reflect the source of impetus, initiative, or support for establishing or formalizing the arrangement. These dimensions are the legal status of the improvement effort which is supported by the arrangement and the legal status of the arrangement itself. For example, a state law requiring all local education agencies to establish proficiency assessment instruments and standards (hence a mandated improvement effort) was a catalyst for several school districts to form voluntarily a proficiency assessment consortium (a freestanding arrangement). On the other hand, voluntary participation in an externally funded school improvement effort such as Teacher Corps (enabled improvement effort) may require the establishment of an IOA (mandated arrangement).

In each of these two dimensions, three categories distinguish among the levels or degrees of legal status. Mandated improvements or arrangements are required by an agency external to member organizations. The external agency may be a governing or administrating agency, a legislative body, or a judicial agency. Enabled improvements or arrangements receive sponsorship, incentives, encouragement, and/or resources from an agency external to member organizations. For example, they may be provided for but not imposed in legislation and/or may receive special technical assistance, consultation, or fiscal resources from external organizations such as state or federal agencies, foundations, or businesses. Freestanding improvements or arrangements are established, maintained, and/or supported primarily or solely by the participating organizations. The results of this study suggest that external agencies do not generally participate as members of the IOAs they require or enable. However, they can, and do, participate as members of other IOAs.

In effect, each of the three categories also represents a policy option or strategy available to one or more organizations for supporting or participating in improvement efforts or arrangements. The mandating option is available only to the external agency (or agencies) that impose(s) the requirement. Although in most instances it is likely that the requirement will come from a single agency, there are instances in which two or more agencies issue similar requirements. For example, in California, improvements in special education have been required by the state legislature as well as by the congressionally mandated PL 94-142. The enabling option is available to the external agency (or agencies) for supporting the desired improvement or arrangement. This option is also available to organizations participating in the improvement or arrangement in the sense that they have the choice of participating or not participating in the enabled activity or IOA. Under this option it is also likely that a single external agency will provide the enabling support, but there are instances in which multiple external agencies cooperate in providing support (e.g., some combination of foundations and/or businesses or a combination of a government agency and a foundation). The freestanding option is available only to participating organizations as an active (rather than passive) possibility for implementing an improvement effort or an IOA.

The cross-classification of the two dimensions, each with three categories, yielded the nine-cell matrix shown in Figure 3. Given the emphasis of this study on interorganizational arrangements, we selected the three IOA categories based on the legal status of the arrangement as the major classification category, and the three classifications based on the legal status of the school improvement effort it supports as the secondary classification. The IOA categories and subgroups in each are:

- I. Mandated Arrangements
    - I.A. Mandated Arrangement-Mandated Improvement Effort
    - I.B. Mandated Arrangement-Enabled Improvement Effort
    - I.C. Mandated Arrangement-Freestanding Improvement Effort
- II. Enabled Arrangements
    - II.A. Enabled Arrangement-Mandated Improvement Effort
    - II.B. Enabled Arrangement-Enabled Improvement Effort
    - II.C. Enabled Arrangement-Freestanding Improvement Effort
- III. Freestanding Arrangements
    - III.A. Freestanding Arrangement-Mandated Improvement Effort
    - III.B. Freestanding Arrangement-Enabled Improvement Effort
    - III.C. Freestanding Arrangement-Freestanding Improvement Effort

In this classification system, each cell or subgroup represents a policy option available for using IOAs to support school improvement efforts. When we classified the 103 arrangements identified in this study, the arrangements occupied seven of the nine cells. None could be classified as mandated arrangements supporting freestanding improvement efforts (I.C.) or enabled arrangements supporting freestanding improvement efforts (II.C). This finding suggests that these two policy options are rarely if ever exercised. Although it is conceivable that federal or state policy might mandate or enable the creation

FIGURE 3

IOA CLASSIFICATION FRAMEWORK

		LEGAL STATUS OF ARRANGEMENT		
		I. MANDATED	II. ENABLED	III. FREESTANDING
LEGAL STATUS OF IMPROVEMENT EFFORT	A. MANDATED	I.A. e.g., Consolidated Application Cooperatives	II.A. e.g., Special Education Consortia	III.A. e.g., Proficiency Assessment Consortia
	B. ENABLED	I.B. e.g., Teacher Corps	II.B. e.g., School Resource Centers, CSIP Consortia	III.B. e.g., Basic Skills National Technical Assistance Consortia
	C. FREESTANDING	I.C.	II.C.	III.C. e.g., Staff Development Consortia

of "general purpose" arrangements* that would support freestanding school improvement arrangements, most federal and state improvement policies tend to be "categorical" (or targeted), and provisions for arrangements supporting these categorical improvement efforts tend to be "derivative" (i.e., the arrangements are mandated or enabled as means to support the larger, but categorical objectives of the mandated or enabled improvement efforts). Consequently, it appears that only freestanding arrangements support freestanding improvement efforts.

Table 2 shows the way in which the 103 arrangements were distributed among the categories, the various topical or programmatic areas within each category and subcategory, along with the major sources of mandate or enablement for each category. There are 15 clearly defined programs or topical areas that account for about 90 percent of the 103 arrangements. The remaining 10 percent support a miscellany of improvement efforts. Of the 15 clearly defined programs, seven focus primarily on staff development activities and account for 35 percent of the total number of arrangements. These staff development arrangements occur in four of the subclasses: I.B.--Teacher Corps Projects, PDPICs, Responsive Education Programs; II.B.--School Resource Centers, Teacher Centers; III.B.--Staff Development Projects; III.C.--Staff Development Consortia. Staff development was the only area supported both in such a concentrated manner and with as many different types of arrangements. Mandates or enablements were provided overwhelmingly by state or federal sources with programs evenly split between the two at seven each. The categories and subgroups are briefly presented in the following pages. Each will be described in detail in Section IV.

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*For example, cooperative intermediate service agencies legislatively required or permitted in 19 states may fall in these two subgroups.

TABLE 2

DISTRIBUTION OF ARRANGEMENTS IN CATEGORIES AND PRINCIPAL SOURCES OF MANDATES OR ENABLEMENTS

CATEGORIES, SUBCATEGORIES, AND ARRANGEMENTS	NUMBER OF IOAs			PRINCIPAL SOURCE OF MANDATE OR ENABLEMENT
I. Mandated Arrangements	35			
I.A. Mandated Improvement Efforts		8		
- Consolidated Application Cooperatives			(8)	State program
I.B. Enabled Improvement Efforts		27		
- Teacher Corps Projects			(6)	Federal program
- Professional Development and Program Improvement Centers (PDPIC)			(2)	State program
- Responsive Education Programs			(13)	Federal program
- Mathematics, Engineering, Science Achievement--MESA			(5)	Foundation, businesses
- Miscellaneous			(1)	Businesses
I.C. Freestanding Improvement Efforts		0		
II. Enabled Arrangements	44			
II.A. Mandated Improvement Efforts		32		
- Regional Occupational Program/Centers--ROP/C			(16)	State & federal programs
- Special Education Consortia			(16)	State & federal programs
II.B. Enabled Improvement Efforts		12		
- School Improvement Consortia			(5)	State program
- School Resource Centers			(2)	State program
- Teacher Centers			(5)	Federal program
II.C. Freestanding Improvement Efforts		0		
III. Freestanding Arrangements	24			
III.A. Mandated Improvement Efforts		4		
- Proficiency Assessment Consortia			(4)	State program
III.B. Enabled Improvement Efforts		6		
- Staff Development Projects			(2)	Federal programs
- Miscellaneous			(4)	Federal programs
III.C. Freestanding Improvement Efforts		14		
- Staff Development Consortia			(6)	
- Health Education Consortia			(2)	
- Career Education Consortia			(2)	
- Miscellaneous			(4)	

I. Mandated Arrangements

The IOA itself is mandated; but the mandated arrangement may support mandated or enabled school improvement efforts. Of the 35 mandated IOAs identified, eight supported mandated improvement efforts (subcategory I.A.) and 27 supported enabled improvement efforts (subcategory I.B.). No mandated arrangement supported a freestanding improvement effort (subcategory I.C.).

I.A. Mandated Arrangement-Mandated Improvement Effort. In this group, virtually all IOA members are required to participate both in the improvement effort and in the supporting arrangement. For example, all California school districts are required by the California State Department of Education (CSDE) to participate in the Consolidated Applications Program through which funds for seven federal and state programs are administered. Districts that receive a total of less than $75,000 in Consolidated Applications funds also are required to participate in a cooperative. Members are required to collaborate on submission of the funding application itself and, more importantly for this study, on sharing administrative, technical assistance, staff development, and evaluation resources and services that members cannot provide sufficiently for themselves.

I.B. Mandated Arrangement-Enabled Improvement Effort. In this group, organizations choosing to participate in an improvement effort sponsored by an external agency are required to form an IOA as one component of their involvement.

Usually, such improvement efforts are programs sponsored by federal or state agencies, and participants apply for funds in response to requests for contract or grant proposals (RFPs). They also may be sponsored by other agencies such as foundations. Because collaboration is required in order to carry out the program, participation in an IOA is thus one condition of eligibility for participation. For example, the Teacher Corps Program was enabled by the federal government to strengthen the educational opportunities available to chidren in areas having concentrations of low-income families, to encourage colleges and universities to broaden their teacher preparation programs, and to encourage institutions of higher education and local education agencies to improve programs of training and retraining for teachers and teacher aides. Individual projects are awarded on the basis of voluntary, competitive applications. However, each project application must include a collaborative arrangement between a school district and an institution of higher education.

II. Enabled Arrangements

The arrangement itself is provided for or supported primarily by an agency or agencies external to IOA member organizations. The enabled IOA may support either a mandated improvement effort or an enabled improvement effort. Of the 44 enabled arrangements, 32 support mandated improvement efforts (II.A.); 12 support enabled improvement efforts (II.B.). No enabled arrangement supported freestanding improvement efforts (II.C.).

II.A. Enabled Arrangement-Mandated Improvement Effort. The arrangement itself is specified as one optional means of implementing the required improvement efforts and subsequently of complying with the mandate. The external agencies also may contribute resources to the arrangement, but they do not participate as members of the arrangement.

IOAs associated with the requirements of the California Master Plan for Special Education, which meets and in many cases exceeds the mandate of PL 94-142, exemplify this category. The Master Plan specifies minimum requirements that all districts and county offices must meet in providing educational programs and services for students with special needs. It also requires that each district and county office submit for CSDE approval its own special education master plan. In addition, the state plan specifies that districts and county offices may collaborate with other districts and/or county offices to provide the necessary programs and services. When agencies exercise this option, they submit for CSDE approval a joint or consortium master plan that represents all members of the particular IOA.

II.B. Enabled Arrangement-Enabled Improvement Effort. The improvement effort is sponsored by an external agency, and the arrangement is provided for, but not required, as a support mechanism. For example, California legislation authorizing School Resource Centers (AB 551) indicates that centers may be established either by single agencies or as a collaborative arrangement.

In some instances, the IOA may be a later, separately sponsored addition, as are the School Improvement Consortia associated with the California School Improvement Program (CSIP). These consortia are formed after participants have received CSIP awards and are supported with additional assistance and funding from the State Department of Education.

III. Freestanding Arrangements

A freestanding arrangement is supported primarily or solely by member organizations. It may support a mandated improvement effort, an enabled improvement effort, or a freestanding effort. Of the 24 freestanding IOAs, four supported mandated improvement efforts; six supported enabled efforts; and 14 supported freestanding improvement efforts.

III.A. Freestanding Arrangement-Mandated Improvement Effort. In this category, IOA members must participate in the improvement effort or meet requirements set forth by an external agency. However, the IOA itself is initiated voluntarily and supported primarily or solely by member organizations. Proficiency assessment consortia illustrate this category. In 1977, Assembly Bill 65 (AB 65) mandated that all California school districts must develop proficiency assessment standards and tests. There was no provision in the legislation or in administrative regulations for collaborative efforts to meet the requirements. Members of these consortia have joined together on their own initiative and contribute resources to the consortia without assistance from nonmember organizations.

III.B. Freestanding Arrangement-Enabled Improvement Effort. The improvement effort is externally sponsored or provided for, but the arrangement itself is initiated voluntarily by the member organizations. There is neither requirement nor provision for the arrangement in the measures that enable the improvement. This class of IOA can occur when several organizations decide on their own to respond to an RFP for an improvement effort. One example is a consortium initiated by several R&D agencies and a university to respond to a federally sponsored program for technical assistance to basic skills projects. This class of IOA also can occur when multiple agencies collaborate to develop their own improvement effort and then seek external support for the improvement effort but not for the arrangement.

III.C. Freestanding Arrangement-Freestanding Improvement Effort. In this group, both the arrangement and the improvement effort are initiated and supported by member organizations without the requirement or sponsorship of external agencies. Examples in this class are consortia which are established and maintained by member organizations to share information and resources in staff development efforts that members have jointly planned and carried out.

III. CENSUS OF INTERORGANIZATIONAL ARRANGEMENTS

The following census of IOAs is presented in three sections. The first provides an orientation to the geographic study area with basic data about population, income, and educational characteristics of the 13 counties. The second presents an overview of the 103 arrangements themselves in terms of participation in the arrangements by seven classes of organizations, and the combinations of organizations that share IOA membership. The third section summarizes IOA data for the three major categories of IOAs (mandated, enabled, and freestanding) in terms of the following: the number of arrangements in each category; organizational class participation by category; and combinations of organizational participants in each category.

Orientation to the Study Area

The overview of basic population, income, and educational characteristics of the study area serves as background for the remainder of this section and for the subsequent report. Table 3 presents demographic characteristics for the state, for the study area as a whole, and for each of the 13 counties in the study area. In addition, the Bay Area* percentages of the state totals are given for land area, population, and educational characteristics.

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* Hereafter, the terms "study area" and "Bay Area" or "Greater Bay Area" are used interchangeably.

TABLE 3

POPULATION, INCOME, AND EDUCATIONAL CHARACTERISTICS OF THE STUDY AREA

	POPULATION						
	Land Area	1978*			1970**		Change 1970-78
	Sq. Miles	Rank in Bay Area	Total	Per square mile	Total	Urban %	Total %
United States****	3,540,023		218,228,000	60.0	203,304,863	73.5	8.3
California	156,361		22,297,000	142.6	19,971,069	90.9	11.6
Bay Area Totals	13,566		5,767,400	425.14	5,311,115		8.6
Bay Area % Calif.	8.7%		25.8%		26.6%		NA
Alameda	733	2	1,101,900	1,503.3	1,071,446	99.0	2.8
Contra Costa	735	4	613,400	834.5	556,116	93.6	10.3
Marin	520	9	222,900	428.7	208,652	92.4	6.8
Monterey	3,324	7	275,000	82.7	247,450	74.6	11.1
Napa	787	12	94,000	119.4	79,140	57.9	18.8
San Benito	1,396	13	21,400	15.3	18,226	42.0	17.4
San Francisco	45	3	658,700	14,637.8	715,674	100.0	-8.0
San Joaquin	1,412	6	313,700	222.2	291,073	76.9	7.8
San Mateo	447	5	585,100	1,308.9	557,361	98.3	5.3
Santa Clara	1,300	1	1,227,500	944.2	1,065,313	97.5	15.2
Santa Cruz	440	11	173,900	395.2	123,790	75.0	40.5
Solano	823	10	208,300	253.1	171,989	92.8	21.1
Sonoma	1,604	8	271,600	169.3	204,885	58.6	32.6

*California Statistical Abstract: 1979. Sacramento, CA: California Department of Finance, 1979, p.11.

**County and City Data Book: 1977. Washington, DC: U.S. Bureau of the Census, 1977, pp. 3, 54-66.

***California Public Schools Selected Statistics: 1977-1978. Sacramento, CA: California State Department of Education, 1979, p.3.

****Statistical Abstract of the United States: 1980. (101st Edition) Washington, DC: U.S. Bureau of the Census, 1980, pp. 6, 12, 13, 447, 455.

TABLE 3 (Continued)

MONEY INCOME				EDUCATIONAL CHARACTERISTICS***							
Per Capita Income, 1974**		Median Income 1969**		Total Number of School Districts					Number of Public Schools	Fall Enrollment	
Rank in Bay Area	Total $	Rank in Bay Area	Total $	U	E	H	ALL	Rank in Bay Area	1977-78	1977-78	Rank in Bay Area
	4,572		9,586								
	5,114		10,729	258	669	115	1,042		7,404	4,157,000	
				58	150	23	231		1,998	1,031,151	
				22.5	22.4	20.0	22.2		26.9	24.8	
6	5,341	5	11,131	14	4	1	19	6	346	192,438	2
4	5,870	4	12,422	7	9	2	18	7	228	127,153	3
1	7,150	1	13,931	2	16	2	20	5	99	37,408	10
7	4,688	9	9,729	4	18	3	25	3	99	50,513	8
9	4,609	6	10,738	3	2		5	10	46	16,253	12
13	4,055	13	8,938		10	1	11	8	17	5,010	13
3	5,990	7	10,495	1			1	11	134	63,098	5
11	4,573	11	9,601	7	10	1	18	7	134	62,808	6
2	6,621	2	13,218	3	17	3	23	4	197	96,042	4
5	5,605	3	12,453	6	22	5	33	2	430	258,383	1
8	4,641	12	9,078	2	8	1	11	8	64	29,535	11
10	4,581	8	9,878	6		6	6	9	80	41,125	9
12	4,501	10	9,666	3	34	4	41	1	124	51,385	7

Two general observations can be made about the characteristics of the study area. First, the counties cannot be considered average or typical, either in the aggregate or separately. For example, Bay Area totals for 1978 population density (425.14 persons per square mile) substantially exceeded both the statewide density (142.6) and the U.S. figure (60.0). In addition, only two of the 13 counties (Napa and San Benito) had a smaller urban population percentage than the 1970 U.S. percentage (73.5); seven of the counties had a greater urban population percentage than the 90.9 percent for California. Only one county had less than 50 percent urban population (San Benito with 42%). We thus note that all of the counties included in the study area have substantial urban populations. None, with the possible exception of San Benito County, would be considered predominantly rural. Second, there is considerable, sometimes extreme, diversity across the counties. This latter point receives greater emphasis in the following summary.

Population. Although the Bay Area counties comprise only nine percent (13,566 square miles) of the state's total land area, they accounted for 26 percent (5,767,400) of the 1978 California population (22,297,000). The area's population increase of almost nine percent between 1970 and 1978 was slightly above the national eight percent increase, and three percent less than the 12 percent statewide increase during the same period. However, population changes for the individual counties ranged from minus eight percent to plus 40 percent.

Diversity among the counties is reflected by the 1978 population and population density figures and by the 1970 percentage of urban population. In 1978, county populations ranged widely from two counties with more than one million residents--Santa Clara with 1,227,500 and Alameda with 1,101,900--to two counties with less than 100,000--Napa with 94,000 and San Benito with 21,400.

In population density (1978), although the Bay Area average of 425.14 persons per square mile substantially exceeded both the statewide and national figures, there was nearly a thousand-fold difference from the extreme high of 14,637.8 in San Francisco County to 15.3 in San Benito County. The other 11 counties ranged less radically (but still considerably) between 1,500 and 83 persons per square mile (in Alameda and Monterey Counties respectively).

Income. Income characteristics are reflected in per-capita income and median family income amounts. For per-capita income (1974), the Bay Area weighted average of $5,549 exceeded the statewide figure of $5,114 by a fairly small amount ($435). The difference among counties was considerably greater, ranging from the high of $7,150 in Marin County to the low of $4,055 in San Benito County. In comparison to the statewide average, six counties had a greater per capita income: Marin ($7,150); San Mateo ($6,621); San Francisco ($5,990); Contra Costa ($5,870); Santa Clara ($5,605); and Alameda (5,341). Seven counties, all within a range of $644 of one another, had less than the California average: Monterey ($4,688); Santa Cruz ($4,641); Napa ($4,609); Solano ($4,581); San Joaquin ($4,573); Sonoma ($4,501); and San Benito ($4,055). Only Sonoma and San Benito are below the 1974 U.S. average of $4,572.

For 1969 median family income, there was a difference of $4,993 between the high in Marin County ($13,931) and the low in San Benito ($8,938). Six counties had amounts greater than the state figure of

$10,729: Marin ($13,931); San Mateo ($13,218); Santa Clara ($12,453); Contra Costa ($12,422); Alameda ($11,131); and Napa ($10,738). Seven counties were below the state figure: San Francisco ($10,495); Solano ($9,878); Monterey ($9,729); Sonoma ($9,666); San Joaquin ($9,601); Santa Cruz ($9,078); and San Benito ($8,938). Only two counties (Santa Cruz and San Benito) were below the national figure of $9,586.

Differences among the counties also are apparent in their predominant businesses and industries. Alameda and San Francisco Counties both have concentrations of heavy industries, commercial enterprises, and service agencies, including many regional or national corporate headquarters. Solano County combines heavy industries and the U.S. Naval Yards. Contra Costa County combines urban centers with light industry and commercial agencies, numerous suburban areas, and some rural areas. In Santa Clara County there are both rural and industrial areas, the latter dominated by the electronics industry of "Silicon Valley." San Mateo County contains many suburban communities and concentrations of light industry and business. Marin County is predominantly suburban, but also has some industry and agriculture. Monterey and Santa Cruz Counties have a similar combination of tourism-oriented services, food processing industries, and agriculture; while agriculture is the predominant economic base for Napa, San Benito, San Joaquin, and Sonoma Counties.

Educational Characteristics. One of the interesting characteristics of public education in California is the trilateral organization of the the 1,042 California public school districts. There are 258 unified school districts which include grades K-12; 669 elementary districts with either grades K-8 or K-6; and 115 high school districts with grades 9-12 or 7-12. In 1977-78, the 258 unified districts accounted for roughly two thirds of the average daily attendance in California schools. The Bay Area counties account for 22.5 percent (58) of the state's unified districts; 22.4 percent (150) of the elementary districts; 20.0 percent (23) of the high school districts; and 22.2 percent (231) of the total number of districts. Each district is a separate local education agency headed by a superintendent and governed by a local school board.

Considerable diversity among the counties is again reflected in the educational characteristics. For example, the total number of school districts per county ranges from one district in San Francisco County (a unified district) to 41 districts (of all three types) in Sonoma County. The range of public schools in 1977-78 ran from 17 schools (spread among 11 districts) in San Benito County to 430 schools (across 33 districts) in Santa Clara County. The range for 1977-78 fall enrollment fell between the low of 5,010 students in San Benito County and the high of 258,383 in Santa Clara. Note that there is no consistent pattern of number of school districts or schools to the number of students in the counties.

Overview of Organizational Participants in IOAs

Table 4 summarizes characteristics of IOAs in terms of participation by classes of organizations, location of organizations relative to the study area (i.e., within Bay Area counties, within California, outside California), the number of arrangements in which each class participates, and the frequency of participation by organization within

TABLE 4

PARTICIPATION IN ARRANGEMENTS BY ORGANIZATIONAL CLASS, LOCATION OF ORGANIZATIONS, AND FREQUENCY OF PARTICIPATION

Organizational Class	Total Participants in Arrangements	Number Bay Area Participants	Number Other California Participants	Number Participants Located Outside California	Number and Percent IOAs in which Organizational Type Participates	Frequency of Participation in IOAs By Individual Organizations												
						Number of IOAs												
						1	2	3	4	5	6	7	8	9	10	11	12	18
Educational Organizations Sub-Total	409	298	87	24		134	139	71	22	14	12	6	7	1			1	2
School Districts	266	231	24	11	90 (87.3)	58	91	68	21	10	10	2	6					
County Offices of Education	58	13	45	-	59 (57.2)		45	1		2	2	4	1	1			1	1
Institutions of Higher Education	41	20	17	4	26 (25.2)	34	3	1	1	2								
Research and Development Agencies	8	2		6	18 (17.4)	7												1
State Departments of Education	3		1	2	6 (5.8)	2		1										
Other Educational* Organizations	28	27		1	8 (7.7)	28												
Interorganizational Arrangements per se	5	5			2 (1.9)	5												
Non-Educational Organizations Sub-Total	76	34	42			76												
Public Agencies and Private Non-profit Agencies**	39	34	5		5 (4.8)	39												
Businesses	37		37		1 (0.009)	37												
Total All Organizations	485	332	129	24	103 (100.0)	210	139	71	22	14	12	6	7	1			1	2

*Other educational organizations include: private schools (2), parochial districts (1), teacher associations and unions (19), school boards (1), professional associations (3), and independent educational organizations.

**Examples of public agencies are Bay Area Rapid Transit, Department of Agriculture, etc. Examples of private non-profit agencies are Planned Parenthood, county health associations, etc.

***Virtually all of these are major national corporations (e.g., Chevron) that are represented in the arrangement by their California based regional or divisional office.

each class. We grouped the 485 organizations identified as participating in one or more arrangements in two larger categories: educational organizations (409) and non-educational organizations (76). Educational organizations were further subdivided into seven types: school districts (266); county offices of education (58); institutions of higher education (41); research and development agencies (8); state departments of education (3); other educational organizations (28); and interorganizational arrangements _per se_* (5). Other educational organizations included private schools, parochial districts, professional educational associations, etc. Two types of non-educational agencies were established. One type, _for profit_, includes all business and industrial participants (37); the other combines both _public_ agencies, such as East Bay Municipal Utilities Districts, and _private non-profit_ agencies, such as Planned Parenthood (39).

Of the 485 participating organizations, 332 (68%) were located in the Bay Area; and 153 (31%) were located outside the area. Of the non-Bay Area participants, 129 were in other areas of California and 24 were in other states. Of the 409 educational agencies, 298 (73%) are within the Bay Area and 111 (27%) were outside the area.

For frequency of participation, the greatest concentrations were the 210 organizations (43% of all organizations) that belonged to only one IOA, and the 139 organizations (28%) that belonged to two IOAs. Taken together, these frequencies accounted for 349 (72%) of IOA members.

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* We included IOAs as an organizational class to account for those instances in which an IOA participates as an organizational entity with individual organizations or with other IOAs in another arrangement.

The remaining 136 organizations (28%) participated in from three to nine arrangements in generally decreasing numbers, with only three participating in more than 10 arrangements.

Non-educational Agencies. Non-educational organizations accounted for 76 (15%) of the total number of IOA participants. Of these, 34 (44%) were exclusively Bay Area organizations, and 42 (55%) were either located in or also served other areas of California. All 76 non-educational agencies participated in only one IOA each. The 39 public and non-profit agencies participated in five of the 103 arrangements studied. All of the 37 for-profit agencies were involved in the same single arrangement. Thus, 76 non-educational agencies concentrated their participation in a total of six of the 103 interorganizational arrangements.

School Districts. More school districts participated in more arrangements than did any other class of educational organizations in this study. Of the 409 educational agencies, 266 (65%) were school districts that were members in 90 of the 103 IOAs. Of the 266 districts, 231 (88%) were Bay Area districts. This, in fact, is the total number of districts in the Bay Area. Every school district in the study area was participating in at least one arrangement. The 35 districts outside the Bay Area (24 in other California areas and 11 outside California) each participated in only one IOA identified in this study.

District participation varied from one to eight IOAs per district. However, participation by the total 266 districts was concentrated between one and three IOAs per district with these three frequencies accounting for about 82% of district participation. Interestingly, more districts participated in two IOAs (91 or 34%) or three IOAs (68 or 26%) than in one arrangement (58 or 22%).

County Offices. The 58 county offices in California accounted for 14 percent of the educational organizations and participated, as a class, in over half of the 103 arrangements. The 58 county offices included 13 in the Bay Area and 45 outside the area. The 45 non-Bay Area offices were involved with the Bay Area county offices in each of two IOAs. Participation by the 13 Bay Area offices was broadly distributed between three and 18 arrangements each, with the concentration between five and seven arrangements.

Institutions of Higher Education (IHEs).* There were 41 IHEs representing 10 percent of the 409 participating educational organizations. Of the 41 higher education institutions, almost as many (17) were located elsewhere in California as were in the Bay Area (20). As a class, institutions of higher education participated in one quarter of the arrangements. Their participation was distributed rather narrowly between one and five IOAs per IHE, with 34 IHEs (83% of the IHEs) participating in only one IOA.

R&D Agencies. Eight research and development agencies (2% of the 409 educational organizations) were IOA participants. Two were located in the Bay Area and six in other states. These agencies participated in 18 of the 103 IOAs. All of the R&D agencies outside of California and one in the Bay Area participated in one arrangement each. The other Bay Area R&D organization participated in 18 IOAs.

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* Although IHE participation by the school, college, or department of education is most frequent, colleges of engineering and other university agencies are also represented.

State Departments of Education. Three state departments of education participated in six of the IOAs. The California agency participated in four arrangements. The other two state education agencies each participated in one IOA.

Other Educational Organizations. There were 28 "other" educational organizations (e.g., private schools, professional associations) represented in the 409 educational organizations, and all but one of these other educational organizations was located in California. Among the 28, they participated in a total of eight arrangements, but each was in only one IOA.

Interorganizational Arrangements. Five interorganizational arrangements were found to participate in yet another arrangement involving other organizations or IOAs. These five IOAs participated in two "second-level" arrangements. All five IOAs were located in the Bay Area, and each one participated in only one of the two "second-level" arrangements.

Table 5 summarizes participation data by total and by organizational type for all 485 organizational participants, for all 409 educational organizations, and for the 298 Bay Area educational agencies. When we look at the frequency distributions for all 485 participating organizations, we see that almost as many (43%) participated in only one IOA as participated in two or more IOAs (56%). In contrast, of the 409 educational organizations, slightly more than twice as many (275 or 67%) participated in two or more arrangements as participated in only one IOA (134 or 32%). All 76 non-educational organizations (100%) participated in only one IOA each. This represents a decrease

TABLE 5

SUMMARY OF PARTICIPATION FREQUENCY FOR ALL ORGANIZATIONAL PARTICIPANTS, EDUCATIONAL ORGANIZATIONS, AND BAY AREA EDUCATIONAL ORGANIZATIONS

			Frequency of Participation										
			Number of Arrangements										
	Total of Organizational Participants		1	2	3	4	5	6	7	8	9	12	18
	No.	% of all organizations	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total	No. % of Total
All Organizational Participants	485	(100)	210 (43.3)	139 (28.7)	71 (14.6)	22 (4.5)	14 (2.9)	12 (2.5)	6 (1.2)	7 (1.4)	1 (0.21)	1 (0.21)	2 (0.41)
Non-educational Organizations	76	(15.6)	76 (100.0)										
Educational Organizations	409	(84.3)	134 (32.8)	139 (34.0)	71 (17.3)	22 (5.4)	14 (3.4)	12 (2.9)	6 (1.5)	7 (1.7)	1 (0.24)	1 (0.24)	2 (0.50)
Bay Area Educational Organizations	298	(61.4)	68 (22.8)	94 (31.5)	71 (23.8)	22 (7.4)	14 (4.7)	12 (4.0)	6 (2.0)	7 (2.3)	1 (0.33)	1 (0.33)	2 (0.67)
School Districts	231	(47.6)	23 (10.0)	91 (39.3)	68 (29.4)	21 (9.0)	10 (4.3)	10 (4.3)	2 (0.86)	6 (2.6)			
County Offices of Education	13	(2.6)			1 (7.7)		2 (15.4)	2 (15.4	4 (30.8)	1 (7.7)	1 (7.7)	1 (7.7)	1 (7.7)
Institutions of Higher Education	20*	(4.1)	13 (65.0)	3 (15.0)	1 (5.0)	1 (5.0)	2 (10.0)						
Research & Development Agencies	2	(0.41)	1 (50.0)										1 (50.0)
Other Educational Organizations	27	(5.5)	27 (100.0)										
Interorganizational Arrangements per se	5	(1.0)	5 (100.0)										

* The 20 IHEs represent 35 percent of the IHEs in the Bay Area counties (excluding theological seminaries, medical, and law schools).

of 66 percent of the number of non-educational as compared to educational organizations participating in multiple arrangements.

Data for Bay Area educational agencies provides a potentially more accurate picture for patterns of participation frequency than do the data for non-Bay Area educational organizations. This is the case simply because we collected no participation data on the 111 non-Bay Area agencies beyond their membership in the 103 IOAs included in this study. Thus the frequency patterns of organizational participation are more accurately represented by Bay Area agencies. Of the 298 Bay Area educational agencies identified in this study, more than three quarters (77%) participated in two or more IOAs. However, only 65 (21%) participated in more than three arrangements.

As noted previously, all 231 school districts in the 13 Bay Area counties were participating in at least one IOA, and 208 (90%) were participating in more than one IOA. These data strongly contradict the frequently encountered assumption that school districts tend to be isolated from one another and from other educational agencies.

The pattern of frequent IOA participation by county offices is to be expected given their intermediate status and the many coordinating functions they are assigned. All but one of the 13 Bay Area county offices participated in five or more arrangements. By contrast, participation in five or more IOAs was minimal among all other types of Bay Area educational agencies.

IOA Categories

Overview of Arrangements by Categories. Findings reported in this section include: (1) the distribution of arrangements in each category by level of the legal status of the IOA (mandated, enabled, freestanding); (2) participation in the arrangement categories by the seven organizational types; (3) the combinations of organization types that shared IOA membership; and (4) the number of member organizations by IOA categories.

Figure 4 displays the number and percent of arrangements that occur in each category of arrangements and also gives the total figures for IOAs associated with each type of improvement effort. Of the 103 IOAs, 35 were mandated, 44 were enabled, and 24 were freestanding. When we look at the three major IOA categories, we see that over three quarters (77%) of the mandated arrangements supported enabled improvements. Of the 44 enabled arrangements, the largest percentage, slightly less than three quarters, supported mandated improvements. Fifty-eight percent of the 24 freestanding IOAs supported freestanding improvement efforts.

Looking at the rows of improvement effort categories, we see that 73 percent of the 44 mandated improvement efforts were supported by enabled IOAs. For the 45 enabled improvement efforts, 27 (60%) were supported by IOAs that are required (mandated) as part of the improvement effort. All 14 freestanding improvement efforts were supported by freestanding IOAs.

Participation in IOAs by Type of Organizations. Table 6 summarizes the extent of participation of the various types of organizations in the various classes of IOAs. The distribution of the 103 IOAs by major class and subclass is shown in the row labelled "Number of IOAs." For example, of the 103 IOAs, 35 are classified as mandated IOAs. Eight of the 35 mandated IOAs supported mandated improvement efforts, and the remaining 27 supported enabled improvement efforts. Participation by organizational type is displayed in the remaining rows of the table.

FIGURE 4

DISTRIBUTION OF ARRANGEMENTS BY CATEGORIES OF ARRANGEMENTS AND BY CATEGORIES OF IMPROVEMENT EFFORTS

IMPROVEMENT EFFORT	ARRANGEMENTS		
Total 103 (100.0%)	I. MANDATED 35 (34.0%)	II. ENABLED 44 (42.7%)	III. FREESTANDING 24 (23.3%)
A. MANDATED 44 (42.7%)	I.A. 8 (7.8%) Total (22.9%) Col. I (18.2%) Row A	II.A. 32 (31.1%) Total (72.7%) Col. II (72.7%) Row A	III.A. 4 (3.9%) Total (16.7%) Col. III (9.1%) Row A
B. ENABLED 45 (43.7%)	I.B. 27 (26.2%) Total (77.1%) Col. I (60.0%) Row B	II.B. 12 (11.6%) Total (27.3%) Col. II (26.7%) Row B	III.B. 6 (5.7%) Total (25.0%) Col. III (13.3%) Row B
C. FREE-STANDING 14 (13.6%)	I.C.	II.C.	III.C. 14 (13.6%) Total (58.3%) Col. III (100.0%) Row C

TABLE 6

PARTICIPATION BY TYPES OF ORGANIZATIONS IN CLASSES AND SUBCLASSES OF IOAs

IOA Major Class	Mandated IOA			Enabled IOA			Freestanding IOA				TOTAL
IOA Sub-Class	Mandated Improv.	Enabled Improv.	TOTAL Mandated IOAs	Mandated Improv.	Enabled Improv.	TOTAL Enabled IOAs	Mandated Improv.	Enabled Improv.	Free-Standing Improv.	TOTAL Free-Standing IOAs	All classes of IOAs
Number of IOAs	8	27	35	32	12	44	4	6	14	24	103
Type of Participating Organizations											
School Districts	8	27	35	32	12	44	4	1	6	11	90
County Offices	8	2	10	26	5	31	4	-	14	18	59
Institutions of Higher Ed.	-	14	14	3	5	8	-	2	2	4	26
R&D Agencies	-	13	13	-	-	-	-	5	-	5	18
State Departments of Ed.	-	1	1	-	-	-	-	3	2	5	6
Other Ed. Organizations	-	-	-	-	3	3	-	2	3	5	8
Non-Ed. Organizations	-	2	2	-	-	-	-	-	3	3	5

School Districts. One or more school districts participated in all eight of the mandated IOAs supporting mandated improvement efforts. Reading across the remainder of the row for school districts, we see that school districts participated in all of the arrangements of every subclass, except for two categories. School districts participated in one of the six arrangements in the freestanding IOA-enabled improvement effort subclass and in six of the 14 arrangements in the freestanding IOA-freestanding improvement effort subclass. School districts participated in a total of 90 of the 103 arrangements. Considering that this study focused on IOAs concerned with school improvement, heavy school district participation would be expected. Nevertheless, it is remarkable that school districts are represented in every one of the arrangements for five of the seven subclasses.

County Offices. County offices were the next most heavily represented type of organization, participating in all eight arrangements in the mandated IOA-mandated improvement effort subclass; in all four of the freestanding IOA-mandated improvement effort subclass of arrangements; and in all 14 of the arrangements in the freestanding IOA-freestanding improvement effort subclass. County offices were also members of 26 of the 32 arrangements in the enabled IOA-mandated improvement effort subclass. However, they were found in less than half (5 of 12) of the "enabled-enabled" IOAs; in only two of 27 of the mandated IOA-enabled improvement arrangements; and in none of the six freestanding IOAs supporting enabled improvements. The county office participation pattern is thus one in which county offices tend to participate in all or most of the arrangements of any major type that support mandated improvement or freestanding *improvement* efforts, but they are much less frequent participants in arrangements that support *enabled improvement* efforts.

Other Organizations. The remaining types of organizations listed in Table 6 are represented in far fewer arrangements. Institutions of higher education (IHEs) are found in five of the seven subclasses of arrangements. Their heaviest representation is in 14 of the 27 mandated IOA supporting enabled improvements (e.g., Teacher Corps). In contrast to the county office pattern of being involved in IOAs supporting mandated improvements, the pattern for IHEs is to be involved in arrangements supporting enabled improvements. This *same* pattern is exhibited even more starkly by *all* the remaining types of organizations. R&D agencies, state departments of education, other educational organizations, and non-educational organizations were *never* found as members of IOAs supporting mandated improvement efforts. Their participation was confined to IOAs supporting either enabled or freestanding improvement efforts.

Before leaving Table 6, it should be noted that mandated IOAs exhibit a pattern of organizational participation that is sometimes spelled out in the mandating requirement. When the mandated IOA supports a *mandated improvement effort*, apparently only school districts and county offices of education are specified as the participants in the mandated IOA. However, *when the improvement effort is enabled*, but the IOA that supports the effort is mandated, many other types of organizations are specified as required (or desirable) members of the arrangement. For example, Teacher Corps projects involve districts and IHEs; the Responsive Education Program involves districts and an R&D agency;

the Mathematics, Engineering, Science Achievement (MESA) Program involves districts, IHEs, businesses, public agencies, and private non-profit agencies.

Participation in enabled arrangements is primarily confined to three types of organizations (school districts, county offices, and occasionally institutions of higher education). When freestanding arrangements are examined, we find the broadest range of types of organizations represented, but only for those supporting enabled or freestanding improvement efforts.

Hence, it appears that it is the legal status of the improvement effort rather than the legal status of the IOA itself that most significantly affects the participation by types of organizations. Specifically, there were a total of 44 IOAs that supported mandated improvements (summed over the three major classes). School districts were found as members of all 44 IOAs. County offices were found in 38 of the 44 (86%). However, aside from IHEs that were found in three of the 44 (7%), no other type of organization participated in any arrangement supporting mandated improvements. By contrast, if the improvement was enabled (45 IOAs), every one of the eight types of organizations was found in at least some of the IOAs supporting these enabled improvement efforts. Finally, if the improvement effort was freestanding, at least six of the seven types of organizations were found as participants in these supporting IOAs.

We thus conclude that there is a marked difference in the policy that mandates, enables, or permits the creation of IOAs. If the improvement efforts are mandated, the policy seems to take a narrow view that results in only school districts and county offices participating in the supporting IOA, regardless of the legal status of the IOA itself. However, if the improvement effort is enabled or freestanding, the policy seems to favor participation by a broad variety of different types of agencies. More specific examples of these policy differences will be presented in the section of this report describing each subtype of IOA.*

Participation in IOAs: Organizational Combinations Classified by Major IOA Categories. Twenty different combinations of organizational types were found among the 103 IOAs. Their frequency and percentage of occurrence are shown in Table 7 as they appeared across all IOAs and in each major IOA category. School district and county office of education cooperation accounted for 39 of the 103 IOAs, the largest single combination. Although school districts and research and development agencies rank second in frequency as a combination, with 13 of 103 arrangements, it should be noted that only two of these IOAs involved districts within the Bay Area; in the other 11 IOAs, the school districts involved in the IOA are located outside the state. The third highest ranking combination is a tie between IOAs in which only school districts participated (12) and IOAs composed of school districts and IHEs (12). Together these four highest-ranking combinations (i.e., districts alone, districts and county offices, districts and R&D agencies, districts and IHEs) accounted for well over half (61%) of all IOA organizational memberships.

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* Data on the source of the mandate and enablement (federal, state, etc.) for both arrangements and improvement efforts also will be included in examples. Some of these combinations were of sufficient complexity to warrant more detailed explanation than seemed appropriate in this census section.

TABLE 7

ORGANIZATIONAL COMBINATIONS BY MAJOR CLASSES OF ARRANGEMENTS

	I Mandated Arrangements		II Enabled Arrangements		III Freestanding Arrangements		TOTAL	
Organizational Combinations*	No.	% by class	No.	% by class	No.	% by class	No.	%
Total Number of Arrangements	35		44		24		103	
SD - CO	7	(20)	24	(55)	8	(33)	39	(38)
SD - R&D	13	(37)	-	-	-	-	13	(13)
SD - IHE	11	(31)	1	(02)	-	-	12	(12)
SD only	1	(03)	11	(25)	-	-	12	(12)
SD - CO - IHE	1	(03)	5	(11)	-	-	6	(06)
R&D - SDE	-	-	-	-	3	(13)	3	(03)
CO - SDE	-	-	-	-	2	(08)	2	(02)
CO - Other Ed	-	-	-	-	2	(08)	2	(02)
CO - Non Ed	-	-	-	-	2	(08)	2	(02)
SD - CO - IHE - Other Ed	-	-	1	(02)	1	(04)	2	(02)
SD - IHE - SDE - Other Ed - Non Ed	1	(03)	-	-	-	-	1	(01)
SD - IHE - Non Ed - CO	1	(03)	-	-	-	-	1	(01)
SD - IHE - Other Ed	-	-	1	(02)	-	-	1	(01)
SD - CO - Other Ed	-	-	1	(02)	-	-	1	(01)
SD & Other Ed	-	-	-	-	1	(04)	1	(01)
CO Only	-	-	-	-	1	(04)	1	(01)
CO - IHE	-	-	-	-	1	(04)	1	(01)
CO - SD - Non Ed	-	-	-	-	1	(04)	1	(01)
R&D - IHE	-	-	-	-	1	(04)	1	(01)
R&D - IHE - Other Ed	-	-	-	-	1	(04)	1	(01)

* NOTE: SD = School districts; CO = County Offices; IHE = Institutions of Higher Education; SDE = State Department of Education; R&D = R&D Agencies.

Another way of viewing the combinations is in terms of the number of organizational types that share IOA membership. Only districts and county offices participated in IOAs made up exclusively of their own types (12 of the IOAs were composed exclusively of districts and one IOA was composed exclusively of county offices). All other organizational types shared membership with one or more of the other types of organization. There were 76 arrangements with only two types of organizations; three IOAs were composed of three types of organizations; three IOAs included four types; and one IOA contained five of the seven types of organizations.

Among the 35 *mandated arrangements* three combinations of types were prominent: school districts and R&D agencies (37% of all mandated arrangements); school districts and IHEs (31%); and school districts and county offices (20%). Seven different combinations of types of organizations occurred in this category. Among the 44 *enabled arrangements*, the most frequent combination was school districts and county offices (55% of all enabled arrangements), followed by school districts only (25%), and school districts, county offices, and IHEs (11%). Again, there were seven combinations of types of organizations found in this category of arrangement. However, among the 24 *freestanding arrangements*, there were 12 different combinations of types of organizations, with the most frequent combination being school districts and county offices (33% of all freestanding arrangements).

We thus see that when interorganizational arrangements are classified by the legal status of the arrangement itself, it is the enabled class of arrangements that displays the least diversity of organizational types. Fully 80 percent of all enabled arrangements are represented by only two combinations: districts and county offices, and school districts alone. Mandated arrangements display only slightly more diversity. Here the two most prevalent combinations account for 68 percent of the IOAs; however, the three most prevalent organizational combinations account for 88 percent of all the mandated arrangements. The greatest diversity is found among the freestanding arrangements where even the five most frequent combinations of types of organizations still account for only 71 percent of the freestanding arrangements.

Participation in IOAs: Organizational Combinations Classified by Type of Improvement Effort Supported. In Table 8 the same 20 combinations of organizations are classified by the legal status of the improvement effort that the IOA supports. The ordering of the combinations of types of organizations and the data in the total column are identical to those in Table 7.

Only three combinations of organizations are found among the 44 IOAs that supported mandated improvement efforts, and 34 of these IOAs (77%) consist of the combination of school districts and county offices. Seven more of these arrangements (16%) consist of school districts only. The remaining three of the arrangements involve school districts, county offices, and IHEs.

The enabled improvement efforts display the greatest diversity in number of combinations of organizations, with 14 combinations in all. Here the most frequent combination, school districts and R&D agencies, accounts for only 29 percent of the arrangements. Two thirds of the IOAs supporting enabled improvement efforts are of one of three combinations: districts and R&D agencies (29%), districts and IHEs (27%), or districts only (11%).

TABLE 8

ORGANIZATIONAL COMBINATIONS BY THE TYPE OF IMPROVEMENT EFFORT THE ARRANGEMENTS SUPPORT

	I Mandated Improvement Efforts		II Enabled Improvement Efforts		III Freestanding Improvement Efforts		TOTAL	
Organizational Combinations	No.	% by class	No.	% by class	No.	% by class	No.	%
Total Number of Arrangements	44		45		14		103	
SD - CO	34	(77)	1	(02)	4	(29)	39	(38)
SD - R&D	-	-	13	(29)	-	-	13	(13)
SD - IHE	-	-	12	(27)	-	-	12	(12)
SD only	7	(16)	5	(11)	-	-	12	(12)
SD - CO - IHE	3	(07)	3	(07)	-	-	6	(06)
R&D - SDE	-	-	3	(07)	-	-	3	(03)
CO - SDE	-	-	-	-	2	(14)	2	(02)
CO - Other Ed	-	-	-	-	2	(14)	2	(02)
CO - Non Ed	-	-	-	-	2	(14)	2	(02)
SD - CO - IHE - Other Ed	-	-	1	(02)	1	(07)	2	(02)
SD - IHE - SDE - Other Ed - Non Ed	-	-	1	(02)	-	-	1	(01)
SD - IHE - Non Ed - CO	-	-	1	(02)	-	-	1	(01)
SD - IHE - Other Ed	-	-	1	(02)	-	-	1	(01)
SD - CO - Other Ed	-	-	1	(02)	-	-	1	(01)
CO Only	-	-	-	-	1	(07)	1	(01)
CO - IHE	-	-	-	-	1	(07)	1	(01)
CO - IHE - SD - Other Ed	-	-	1	(02)	-	-	1	(01)
CO - SD - Non Ed	-	-	-	(02)	1	(07)	1	(01)
R&D - IHE	-	-	1	(02)	-	-	1	(01)
R&D - IHE - Other Ed	-	-	1	(02)	-	-	1	(01)

Note. SD = School districts; CO = County Offices; IHE = Institutions of Higher Education; SDE = State Department of Education; R&D = R&D Agencies.

The 14 IOAs supporting freestanding improvement efforts are not as diverse as the IOAs supporting enabled improvement efforts, having only eight different combinations. But in this instance the three most frequent combinations support 57 percent of the freestanding improvement efforts, and the four most frequent combinations support 71 percent of the efforts.

We thus find some marked differences in the variety of combinations of types of organizations that enter into arrangements designed to support different classes of school improvement efforts. If the improvement effort is mandated, the chances are greater than nine in 10 that the arrangements will consist either entirely of school districts or of school districts and county offices of education. At the same "nine in 10" level, we are likely to find at least seven different combinations of organizations supporting freestanding school improvement efforts, and 10 or more different combinations supporting enabled school improvement efforts.

Participation in IOAs: Geographic Proximity. Another pattern of participation was reflected in the geographic dispersion or concentration of IOA members. Of the 103 arrangements, 64 were intra-county IOAs (i.e., they involved only organizations that are located within the same county). Inter-county arrangements, those with members from more than one county, totaled 24. Of those 24, two thirds (16) involved organizations only in Bay Area counties, usually contiguous counties. The remainder (8) were equally divided between IOAs that included agencies in non-Bay Area counties contiguous to the study area, and those organizations in counties not contiguous to the study area. The other

15 arrangements were interstate arrangements (i.e., they included at least one member in another state). Thus we note that IOA membership was heavily concentrated among geographically proximate organizations, with 80 percent of the arrangements involving either intra-county or contiguous inter-county membership.

Participation in IOAs: Size of Arrangements. In Table 9 the range of IOA size is shown for the total of IOAs, for each major IOA class, for the seven subclasses, and for subtotals across school improvement subclasses. The full range of IOA sizes was extremely broad, ranging from two to 93 participating organizations. Just under 70 percent of the IOAs had fewer than 10 member organizations, with 48 IOAs having two to four members and 24 having five to nine members. In general, the larger IOAs were in the enabled and freestanding arrangement categories; and within the enabled IOA category, the larger arrangements were in the subclasses of mandated improvements and freestanding improvements.

When size of IOA is considered in terms of the type of improvement effort supported, we see a marked difference: 32 of the 45 IOAs supporting enabled improvement efforts (71%) contained four or fewer organizations, while only 12 of the 44 IOAs supporting mandated improvement efforts (27%) were this small. On the other hand, a few of the IOAs supporting enabled improvements were relatively large (four of the IOAs supporting enabled improvements contained more than 30 organizations, but only one of the IOAs supporting mandated improvements was this large). However, this latter difference involves only a small portion of the IOAs. In general, the IOAs supporting mandated improvements

TABLE 9

SIZE OF ARRANGEMENTS BY ARRANGEMENT CLASS

	Total Arrange-ments	Number of Member Organizations										
		2-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	56-60	93
Arrangement Class												
Total	103	48	24	9	2	7	4	2	2	2	2	1
I. Mandated Arrangements	35	24	5	2	-	1	1	1	-	-	-	1
I.A. Mandated Improvement	8	1	3	2	-	1	1	-	-	-	-	-
I.B. Enabled Improvement	27	23	2	-	-	-	-	1	-	-	-	1
II. Enabled Arrangements	44	16	13	3	2	5	2	-	2	1	-	-
II.A. Mandated Improvement	32	11	11	3	2	3	1	-	1	-	-	-
II.B. Enabled Improvement	12	5	2	-	-	2	1	-	1	1	-	-
III. Freestanding Arrangements	24	8	6	4	-	1	1	1	-	1	2	-
III.A. Mandated Improvement	4	-	1	2	-	-	1	-	-	-	-	-
III.B. Enabled Improvement	6	4	2	-	-	-	-	-	-	-	-	-
III.C. Freestanding Improvement	14	4	3	2	-	1	-	1	-	1	2	-
Subclass A & B Subtotals												
A. Mandated Improvement	44	12	15	7	2	4	2	-	1	-	-	-
B. Enabled Improvement	45	32	6	-	-	2	1	1	1	1	-	1
C. Freestanding Improvement	14	4	3	2	-	1	-	1	-	1	2	1

tended to be much larger than the IOAs supporting enabled improvements.*

Between-County Differences

Examination of between-county differences in IOA activity revealed several findings summarized in Table 10. First, the number of IOAs in which organizations within each county participated covers a broad range--from 25 IOAs in Santa Clara and San Francisco Counties to seven in San Benito County. However, within this range nine of the counties had 10 or fewer IOAs.

Second, with the exceptions of Santa Cruz and San Joaquin Counties, the number of IOAs in which organizations in each county participated tended to be associated with the population and public school enrollment in the county. In general, the counties with larger populations and larger public school enrollments also had the larger numbers of IOAs. This tendency is consistent with the Hood and Blackwell (1979) findings that size of population and school enrollment are the most consistent predictors of general educational knowledge production, dissemination, and utilization (KPDU) activities. In other words, and very broadly speaking, countywide IOA activity appears to follow general KPDU activity which appears to follow levels of population and public school enrollment.

To the extent that population and enrollment levels reflect or stand as proxies for availability of educational resources in general, it appears

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* The size distribution for IOAs supporting freestanding improvements is based on only 14 IOAs and is thus too small to provide reliable contrasts. This distribution is much like the distribution for the IOAs supporting mandated arrangements.

TABLE 10

BETWEEN COUNTY DIFFERENCES IN IOA ACTIVITY

	Population 1978	Public School Enrollment 1977-78	Number of IOAs in which County Organizations Participate	Number of IOAs in which County Offices Participate	Range of IOAs per School District	Number of Intracounty IOAs	Number of Intercounty IOAs	Number of Interstate IOAs
Santa Clara	1,227,500	258,383	25	18	3-8	21	4	
San Francisco	658,700	63,098	25	6*	6*	1	9	15
Alameda	1,101,900	192,438	19	5	1-6	7	11	1
San Mateo	585,100	96,042	13	12	1-4	10	4	
Contra Costa	613,400	127,153	10	7	2-5	3	7	
Sonoma	271,600	51,385	9	6	1-3	5	4	
Solano	208,300	41,125	9	6	3-4	2	7	
Santa Cruz	173,900	29,535	9	9	2-4	4	5	
San Joaquin	313,700	62,808	8	7	2-4	2	6	
Monterey	275,000	50,513	8	8	1-3	3	5	
Marin	200,900	37,408	8	7	1-3	4	4	
Napa	94,000	16,253	8	7	3-5	3	5	
San Benito	21,400	5,010	7	5	1-2		7	

* There is a single district for the city and county of San Francisco.

that collaboration occurs more frequently in areas which have greater resources and less frequently in areas which have fewer resources. Since one frequently cited benefit of collaboration is extending or multiplying scarce resources, this pattern suggests a discrepancy between levels of resource need and levels of resource-extending collaboration. As several interview respondents pointed out, in order to take advantage of such collaboration, organizations must have some slack resources. In particular, they must have at least one staff member who can serve as the organizational representative. Usually such an assignment adds to rather than replaces the representative's existing responsibilities. Organizations with the greatest need to extend their general resources may also be the ones that have less staff and therefore time available for participation.

Third, most of the county offices of education were participating in two thirds or more of the total number of IOAs in the county. The exception in San Francisco can be partially accounted for by the fact that the city and county districts are combined in a single unit.

Fourth, and again very generally, school district participation in IOAs tends to be associated with the number of IOAs in which other county organizations participate. The larger the total number of IOAs in which other county organizations participate, the larger the number of IOAs per district in terms of the range of frequency.

Fifth, in counties where there is a larger total number of IOAs, there is also a larger number of intra-county IOAs. As a corrollary, in counties where there is a smaller total number of IOAs, there is a greater number of inter-county IOAs.

Summary

IOA Categories. A total of 103 interorganizational arrangements were identified within the 13-county study area. The arrangements were grouped in three major categories--mandated, enabled, and freestanding--according to the legal status of the arrangement itself. Each of these categories was then further divided into subclasses by the type of improvement effort--mandated, enabled, and freestanding--supported by the IOA. This established nine possible subclasses of arrangements and improvement efforts. No arrangements were found for two of the subclasses: 1) mandated IOA supporting a freestanding improvement effort and 2) enabled IOA supporting a freestanding improvement effort.

For mandated and enabled IOAs, over three quarters of the arrangements fell into the subclass that supported the opposite class of improvement effort. That is, most mandated IOAs support enabled improvement efforts, and most enabled IOAs support mandated improvement efforts. Over half of all the IOAs identified belonged to one of the four subclasses in which there was joint external influence, mandated or enabled, on both the IOA itself and the school improvement effort the IOA supported. IOAs based on mandate or enablement of the IOA itself or of the improvement effort they supported accounted for 86 percent of all IOAs. Only 14 percent of the IOAs were freestanding arrangements supporting freestanding improvement efforts. We thus see that some form of external stimulus significantly affects the formation of the great majority of all these school improvement IOAs.

Organizational Participation in IOAs. Organizations participating in IOAs totaled 485. Sixteen percent were non-educational agencies, each of which participated in only one arrangement. The educational agencies

(84% of all participating organizations) were grouped in seven organizational types: school districts, county offices of education, institutions of higher education, research and development agencies, state departments of education, other educational agencies, and IOAs *per se*.

School districts and county offices were the most frequent participants in IOAs. Districts participated in 90 arrangements distributed throughout all seven subclasses of IOAs. Moreover, *all* of the arrangements in each of five IOA subclasses had at least one participating school district. County offices were represented in 59 IOAs. They participated in all of the freestanding IOAs supporting freestanding improvement efforts and in most of the IOAs supporting mandated improvement efforts. The predominance of district and county office participation in IOAs seems attributable to the nature of improvement efforts in general and to the functional relationship between districts and county offices. By definition, most school improvement activities occur at the district or building level. In addition, most federal and state improvement policies are targeted (whether mandated or enabled) to that level. Thus, it should not be surprising to find that most collaboration for improvement occurs among the organizations required or enabled to improve. County office participation can be accounted for as a logical extension of the service and coordination functions they are assigned in order to support local districts within their areas.

Of the other organizational types, only IHEs were represented in as many as five of the seven subclasses of IOAs. However, they appeared in only 26 of the 103 arrangements and were represented most heavily in mandated arrangements supporting enabled improvement efforts. R&D agencies were represented only in arrangements supporting enabled improvement efforts. The concentrated participation of IHEs and R&D agencies in arrangements supporting enabled improvements can be speculatively attributed to the nature and functions of these organizational types. Although both types of organizations can and often do have service components, direct service or support of school improvement efforts is not a major purpose or function in either IHEs or educational R&D agencies. In IHEs, the major focus is teaching and research. Service activities, in general, are usually carried out by individual faculty as individuals rather than as official representatives of the institution. The major focus of most R&D agencies, as their label indicates, is on research and development activities (although the R&D may be on improvement efforts). Not surprisingly, intraorganizational resources are likely to be focused primarily, or almost exclusively, on the major functions. Resources for almost any other activities or functions must come from external sources. In addition, most R&D agencies depend on external resources (e.g., grants and contracts) for almost all their work. Thus collaboration with any other organizations for any purpose is likely to occur only if the collaborative activity is externally supported.

Participation Frequency. A majority of the organizations identified participated in two or more IOAs. Over three fourths of the educational organizations in the Bay Area were members of at least two IOAs, primarily because of the active involvement of school districts and county offices. All Bay Area districts participated in at least one IOA, and 90 percent were members of two or more IOAs. All but one of the county offices in the Bay Area participated in at least five IOAs.

Combinations of Organizational Classes. Among the 103 arrangements, 20 different combinations of types of organizations were found. Only school districts and county offices were included in more than half of these organizational combinations. The combination of school districts and county offices accounted for almost 40 percent of the IOAs. Nearly three fourths of all IOAs were made up of one of these four combinations: school districts only, districts and county offices, districts and IHEs, and districts and R&D agencies.

Mandated arrangements tended to involve districts working with either R&D agencies, IHEs, or county offices. Most of the enabled arrangements were composed of either districts and county offices or school districts alone. The most frequent combination of organizations in freestanding arrangements consisted of school districts and county offices.

Geographic Proximity. Most agencies collaborating in an IOA were located either in the same county or in contiguous counties. This finding may be associated with the high density of human and organizational population in the study area: there are a greater number of organizations available for collaboration than would be available in less densely populated areas, and thus, it is seldom necessary to reach beyond these geographic boundaries. If this is the case, we would expect similar patterns of geographic participation only in states or substate regions with similar population density.

An alternative or additional possibility is that educational organizations, especially school districts, within the same county serve clientele that are similar in their social, economic, and political characteristics. To the extent that this is the case, it seems logical that organizations should more frequently work with other organizations that are socially, politically, and culturally as well as geographically close.

Size of Arrangements. Most of the IOAs had fewer than 10 member organizations: almost half had two to four members, and nearly one quarter had five to nine members. Again we must speculate about the reasons for this pattern. With a large number of organizations available for collaboration within the area (and within most counties), the size of arrangements is not limited by availability constraints. It seems more likely that logic, or prior experience, or even instinct have suggested that more work can be accomplished more effectively when there are fewer lines of communication and fewer resource sources to be coordinated.

Policy Implications

The IOA census data suggests several points that may be of interest to policymakers.

1. At least in these 13 San Francisco Bay Area counties, interorganizational arrangements supporting school improvements are a ubiquitous reality. Every school district and every county office of education in this area was a member of at least one arrangement. Ninety percent of the 231 school districts participated in two or more arrangements, and 12 of the 13 county offices participated in five or more arrangements. Five other types of educational and non-educational organizations were also represented, although participation was frequently confined to involvement in only one or a few IOAs.

2. Educational agencies collaborate in formal interorganizational arrangements most often when there is some external stimulus via mandate or enablement that affects the IOA itself, the improvement effort it supports, or both.

3. Participation by type of organization is profoundly affected by the status of the school improvement effort that is supported by the arrangement. School districts and county offices tend to be virtually the only members of mandated arrangements supporting mandated improvements. But when a mandated arrangement supports an enabled improvement effort there is typically a broad range of types of organizations that may participate. As we shall see in the next chapter, much of this difference is traced to the locus of the stimulus (federal, state, local, or some combination) and to the predominant philosophy and strategy behind the mandating or enabling program policy.

4. Educational organizations form IOAs with other agencies that are geographically close. Usually IOA members are located in the same county or in contiguous counties. Perhaps partially for this reason, most IOAs tend to have fewer than 10 member organizations. Conversely, an apparent preference for smaller size may influence participation primarily of geographically proximate organizations. As we shall see, size of the arrangement, composition of the arrangement by types of organizations participating, and the locus and nature of external stimulus all affect the IOA structure, governance, activities, and outcomes. These points will be examined in greater detail in the following section, which provides descriptions of arrangements in all the subclasses.

IV. COMPARISONS OF CHARACTERISTICS OF IOA TYPES

This section provides summary comparisons of the seven types of arrangements according to the five dimensions of the analytic framework and the relational properties associated with each dimension. The summary comparisons are drawn from detailed descriptions of each type of IOA which are included as an appendix to this report. As Table 11 shows, we have used a single ordered code (high, medium, low) wherever possible to simplify comparisons across the IOA types. Distinctions among the three levels are explained in the discussion of each dimension and property, as are the meanings and distinctions of the nominal codes. In most cells, a single label has been used to characterize all or most of the IOAs being compared within that cell. However, in some instances there was a sufficient range among the IOAs on a given property that a dual coding seemed appropriate (e.g., high-medium); where this occurs, the first word indicates at least a slightly predominant tendency in that direction (e.g., medium-high, high-medium, low-medium).

Two points should be emphasized in advance of the discussions. The first is that, for both the summary comparisons and the detailed descriptions, the focus is on the core characteristics of the type of arrangement and variation across or between the types rather than on details and variation within the types. The intent is to give an overall picture or sense of each type of IOA rather than to impart details about individual arrangements.

TABLE 11

COMPARISON OF SEVEN TYPES OF IOAs ON 14 RELATIONAL PROPERTIES

DIMENSIONS	RELATIONAL PROPERTIES	Type of IOA (103 Total)						
		I. Mandated IOA (35)		II. Enabled IOA (44)		III. Freestanding IOA (24)		
		A. (8) Mandated Improvement	B. (27) Enabled Improvement	A. (32) Mandated Improvement	B. (12) Enabled Improvement	A. (4) Mandated Improvement	B. (6) Enabled Improvement	C. (14) Freestanding Improvement
HISTORY	Circumstances that led to IOA	State program and requirement Enduring	Federal & state programs Foundations, businesses Transitory	Federal & state programs & legislation Enduring	Federal & state programs Transitory	State legislation Enduring	Federal program Transitory	Member organizations Transitory
CONTEXT	Cooperative Environment: support for collaboration external to IOA member organizations	High	High	High	High	High	High	High
	Resource Availibility: resource sources external to member organizations	High	High	High	High	High	High	High
STRUCTURE	Formalization: degree of official sanction given to exchange by members	High	High-medium	High	High	Medium	High-medium	Medium-low
	Intensity: size of investment required for member participation	Low $ High-medium staff time	Low $ High staff time	Low $ High staff time	Low $ Medium staff time	Low $ High staff time	Low $ Medium-low staff time	Low $ Low staff time
	Reciprocity: extent of mutual agreement about bases and conditions of exchange	High	High	High	High	High	High	High
	Standardization: extent to which units and procedure for exchange are fixed	Medium-high	Medium-high	High	Medium-high	Medium-high	Medium	Medium

	Types of Coordinating Mechanisms	Designated Coordinating Agency/Agent (DCA/A) Advisory committee Multiple IOA staff	DCA/A Advisory committees Multiple IOA staff Policy board Multiple IOA staff	DCA/A Advisory committees Steering committee Joint powers board Multiple IOA staff	DCA/A Rotating chair Policy board Advisory committee	DCA/A Steering committee	DCA/A Steering committee	DCA/A Steering committee Rotating chair
	Degree of Coupling: levels at which IOA linkages occur; multiplexity of ties among members	High	High	High	High	High	Medium-low	Medium-low
OPERATIONS	Formalization: extent of exchange coordination by an intermediary	High	Medium-high	High	Medium	Medium-high	Medium	Medium
	Intensity: frequency of interaction among members	High-medium	Medium-high	High	High-medium	High	Medium-low	Medium-low
	Reciprocity: directions of exchange	Multilateral	Multilateral	Multilateral	Multilateral	Multilateral	Multilateral	Multilateral
	Context: circumstances under which linkage mechanisms are employed	Most formal interactions	Most formal interactions	Most formal interactions	Most formal interactions	Most formal interactions	Most formal interactions	Most formal interactions
OUTPUTS	Results of IOA: direct outputs to members and clients	Services Activities Mandate compliance	Services Activities	Services Activities Mandate compliance	Services Activities	Products Services Activities Mandate compliance	Products Services	Activities Services

The second point is that these are "soft" rather than "hard" comparisons. That is, the rating in each cell represents our overall perceptual assessment of the several sources of data associated with each property for each IOA type; it is not based on consistently "hard" quantitative data. For example, our rating of structural intensity--the size of resource investment required for member participation--is an assessment of the cumulative investment of two kinds of resources, money and staff time. Although we had data about the amount of member dollar contributions to most of the IOAs and data about most IOA budgets, we did not attempt to collect data from each member of each IOA or from a statistical sample of IOA members about the proportion of the total member budget that the contribution represented. Similarly, we had data about the number of regular IOA meetings and activities, but we did not have data from all member organizations about the amount and proportion of total staff time spent in IOA-related work (e.g., amount and proportion of time spent by organizational representative; total number and proportion of staff members involved in various phases of IOA work and activities).

As a result, generalizability of the comparisons is limited. Nonetheless, the comparisons are useful in providing an additional map of the several IOA types. In addition, distinctions among the types and the patterns across the types can suggest questions to be raised in future research.

History

Circumstances that led to the IOA. Although each IOA has a different history of particular contacts, events, and procedures leading to its formation, virtually all have in common substantial prior contacts among all or most of the member organizations. In most instances, the members have had a variety of relationships and interactions ranging from informal individual contacts to formal organizational relationships in one or more other IOAs. In addition, these contacts, in the aggregate for each IOA, have continued for a long period of time--enduring among members of some IOAs over a period of 20 years. Not surprisingly, in most instances the longer-term relationships have been among the school districts and county offices, especially those within the same county. The shortest-term pre-IOA contacts and relationships appear to occur in IOAs involving educational agencies and private organizations.

Comparisons among the IOA types show three general patterns of historical circumstances, each associated with the type of improvement effort supported by the IOA type. It is these three patterns that suggested the IOA classification system. Arrangements supporting mandated improvements (I.A.; II.A.; III.A.), whether the IOAs themselves are mandated, enabled, or freestanding, were established or formalized in response to state or federal legislative or administrative requirements. Similarly, most arrangements supporting enabled improvements (I.B.; II.B.; III.B.) came about in response to requests for proposals (RFPs) solicited by state or federal agencies sponsoring the various improvement efforts. In this study the only exception to federal/state sponsorship occurred in six mandated IOAs that supported improvements sponsored at least in part by businesses and/or foundations; logically, however, this source of sponsorship could occur for any type of IOA supporting an enabled improvement. The third pattern is confined to freestanding IOAs that support freestanding improvement efforts (III.C.). In contrast to the other IOA-improvement combinations, both the arrangements and the improvement efforts were established or formalized primarily on the initiative of member organizations.

A final comparison on the historical dimension, primarily speculation on our part, concerns whether different types of IOAs are likely to be enduring or transitory. Again the differences are associated with the types of improvements supported by the IOA types. The assessments are based on the combined history of IOAs within each type and our judgment of future IOA trends given real and anticipated changes (or lack of changes) in external requirements and funding patterns.

The three types of IOAs supporting mandated improvements (I.A., II.A., III.A.) we have labeled "enduring" to indicate the frequently long-term past relationships in these IOAs and to suggest that most of these IOAs seem likely to continue indefinitely. For example, the Consolidated Applications Cooperatives (in which both the improvement and the IOA are required--I.A.) were mandated by the California State Department of Education in 1972. In addition to the nearly 10 years that these IOAs have existed under this mandate, some members of some of the IOAs had been working together in a similar, formal manner for five to 10 years. The services provided by this set of IOAs are sufficiently important, even critical in some instances, that they would be likely to continue even if the dual mandate were eliminated. In fact, several members of at least one of these arrangements have elected to remain as members even after they have become eligible to waive their participation requirements.

There is a similar history of working together for many of the 32 enabled arrangements that support mandated improvements (II.A.). Half of these are Regional Occupational Programs that operate under the State Master Plan for Vocational Education established in 1972; the other half are special education consortia or Special Education Service Regions that operate under the State Master Plan for Special Education established in 1971. Although most have been organized in their present form only since their respective Master Plans have been in effect, almost all the existing IOAs represent expansions of previous formal collaboration directly associated with the present improvement effort (e.g., previous shared pupil evaluation services in special education; previous interdistrict attendance agreements in occupational programs). The nature of improvements required by the Master Plans and the extensive joint efforts that now exist to meet these requirements suggest that few, if any, of the member organizations could be in compliance on their own. At the same time, the nature and variety of services available to member organizations suggest that most of the IOAs would continue in some form even if the governing mandate were diminished or eliminated. For example, in special education consortia, the coordinating agency administers pupil evaluations, fair hearings, shared classes, and services required from non-consortium agencies.

The designation of the third subgroup (III.A) as "enduring" was, again, principally speculation. All of these arrangements were formed to help member districts meet proficiency assessment requirements set by the California Assembly in 1976. By the end of the study, members were technically in compliance with the mandate so that the original purpose of the arrangements had been fulfilled. However, rather than dissolving the IOAs or continuing to interact on an informal basis, members in each IOA were planning to continue working together to expand and redefine the various resources and materials (e.g., test item banks) that their respective arrangements had developed. Our general sense was that members expected to continue the arrangements indefinitely, although perhaps with a reduced level of activity and resource investment.

Labeling the remaining four IOA subgroups "transitory" was somewhat problematic. On the one hand, most of the enabled improvements supported by three of the IOA subgroups (I.B., II.B., III.B.) were part of federal or state programs that are enabled (in these instances meaning funded) for specific, fixed periods of time, usually not more than three years. Although it is possible for members of these consortia to apply for and receive funding renewal, the IOAs themselves were initially established and expected to exist only within the time limits of the original external grant or contract period, and within the time limits of any subsequent renewal. In addition, the external sponsors generally provide the largest amounts (and proportions) of fiscal resources for the enabled improvement efforts and associated IOAs. Among the federal and state-enabled programs, only one state program--the Professional Development and Program Improvement Centers (PDPIC, I.B.)--makes any provision for reducing external funds and increasing member contributions as a means of continuing the improvement effort at the end of a specified grant period. These two factors suggest that the collaborative improvement efforts would be unlikely to continue very long, if at all, if external support were substantially decreased or eliminated.

On the other hand, some of these IOAs have continued their joint efforts for as long as the sponsoring program has existed; that is, they have continued their own commitment to the improvement effort and to their collaboration through repeated successful applications for funding renewal. For example, all 13 of the Responsive Education Programs (I.B.) have continued since the federal program was established in 1968. We recognize that similar long-term associations may exist outside the study area under this and other federal programs such as Teacher Corps and Teacher Centers, both of which were begun in 1965. Where collaborative improvement efforts have existed over such a long period of time, we would expect those efforts to continue in spite of reduced or eliminated external funding, though perhaps in substantially, even drastically modified form and scope.

Freestanding IOAs supporting freestanding improvements (III.C.) constitutes the fourth and last subgroup of transitory arrangements. Although one of these 14 IOAs had been in existence for almost 25 years and three for almost 10 years, the other 10 were less than five years old at the time of the study. In addition, this subgroup had fewer prior long-term formal relationships related to the existing collaborative effort than did the other groups. These two factors (in addition to their generally medium to low ratings on the other properties) suggest that these types of arrangements are even less likely than the others to continue over longer periods of time.

It is important to emphasize here that we do not assume that enduring arrangements are "good" and transitory arrangements are "bad." We simply note the circumstances which seem to contribute to longer versus shorter working relationships. The appropriate judgment about how long or whether to continue an IOA rests with the participating organizations based on the utility of the arrangement in supporting the desired improvement.

Context

Cooperative environment: support for collaboration external to IOA member organizations. Both statewide and in the study area, we found the general environment to be highly supportive of collaboration as an improvement support mechanism. An essential contributing factor is the emphasis that the California State Department of Education (CSDE) has placed on collaboration in the numerous state programs it has sponsored and administered. This emphasis reflects a consistently stated view by CSDE personnel that the most effective improvement efforts will arise from shared knowledge and other resources at the local level (Cates, McKibbin, and Hart, 1980). State-sponsored programs involving IOAs occurred in all but two of the seven IOA subgroups. In addition, there were as many state programs identified as there were federal programs (seven each), and there were almost twice as many arrangements associated with the state programs (53) as there were with federal programs (30). Slightly over half of the 103 arrangements were involved with state programs* (see Table 2, p. 24).

The activities and accomplishments of these and other collaborative efforts are frequently highlighted in CSDE newsletters and press releases related to the various programs. Perhaps the most recent visible sign of support has been the establishment of a Consortia Support Unit within the CSDE. Although the unit's services are specifically targeted to consortia supporting the California School Improvement Program (II.B.), the existence of such an office underscores the general CSDE support for collaboration.

In addition to this specific CSDE emphasis on collaboration, there are several statewide support networks with which numerous IOAs are affiliated. For example, there is a strong quasi-formal network among directors of the state-mandated Consolidated Applications Cooperatives (I.A.) and a growing informal network among School Improvement Consortia (II.B.). Some of the federally sponsored programs have provided encouragement for collaboration beyond grants or contracts for individual IOAs. For example, the national Teacher Corps Program (I.B.) has included sponsorship of state or regional networks of Teacher Corps projects.

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*Although both state and federal programs support improvement efforts in II.A., the IOA enablement is associated with the state program.

Resource availability: resource sources external to member organizations. The study area, like California as a whole, is considered rich in personal and educational resources. As we indicated in the orientation to the study area, both the state and the 13-county area generally exceed the national figures on characteristics such as per capita and median income. When Hood and Blackwell (1979b) developed a typology of states' educational and knowledge production, dissemination, and utilization capability, California ranked first in six of seven hierarchical groupings of predictors such as state per capita school expenditure and number of higher education institutions, and indicators such as the number of ERIC clearinghouses and ratings of State Facilitators in the National Diffusion Network.

Within the study area, more tangible evidence of resource availability is indicated by the various state- and federally funded programs which the IOAs support, and by the consultation and technical assistance services available from the CSDE and the 13 county offices of education. In addition, there are 58 colleges and universities in the area (excluding professional and specialized schools in such areas as law, medicine, theology), four major research and development agencies which focus in whole or in part on educational improvement, and an uncountable number of private educational consultants.

Structure

Formalization: degree of official sanction given to the exchange by member organizations. By definition, all the arrangements included in the study were based on some kind of formal, official agreement between or among the participating organizations. However, there were some readily apparent differences across the IOA types in the number and kind of formalization indicators. There were three principal kinds of agreements, each indicating a different level of commitment on the part of the signatory organizations and each requiring a different level or levels of approval within each organization.

A legal contract was the strongest form of agreement and could be represented by a joint application or proposal for federal or state funding for the improvement program and/or the IOA, or by a joint powers agreement to set up the IOA as a separate, formal governing and administrative body. Generally these agreements required the approval of both the chief executive officer (usually a superintendent) and the board. Major changes in these agreements would require approval by all members and the external funding source with which the agreement was made. Similarly, a member's withdrawal from the arrangement also would require approval of the external agency.

An interagency agreement was the intermediate form. Although these agreements generally spelled out the terms of the arrangement (e.g., the time period covered by the agreement, the amount of the member's contribution, the general responsibilities of members), they varied considerably in the level of detail about specific activities and services to be provided by the IOA. In addition, since the agreement was not legally binding, a member could withdraw from an arrangement covered only by this form of agreement. Usually these agreements were signed by the chief executive officer or by another executive-level person. For the most part, they were between individual member organizations and one member agency designated to coordinate and administer the arrangement. Changes in the agreement could be negotiated among the members or by one member with the coordinating agency during the period of the agreement.

A memorandum or letter of agreement was the third form and the least formal of the agreements. As with the interagency agreement, it was usually directed from the member organizations to the coordinating agency. In most instances it too indicated the amount of the member contribution and the services, activities, or basic purpose of the arrangement. It differed from the other forms of agreement in that the signatory was sometimes a unit or program manager rather than the chief executive officer or other executive-level person.

In the three IOA subgroups rated high on formalization (I.A., II.A., II.B.) the predominant type of agreement was some form of legal contract. In addition, there were numerous instances in these groups of multiple forms of agreement, usually a combination of an interagency agreement with the legal contract. In some instances (e.g., in some special education consortia--II.A.), the chief executive officer of each organization participated directly in the arrangement either as the IOA representative or as a member of an advisory committee for the collaborative effort. The combination of these factors indicated a strong official commitment to the collaborative effort.

Only one subclass (III.A.) was composed exclusively of IOAs with a medium rating, which was indicated by these features. The arrangements were based primarily on a single agreement (generally a legal contract in the form of a joint proposal, or an interagency agreement). In addition, the organizational representatives usually were subunit managers or program directors. Although in some instances an executive staff member (e.g., assistant superintendent for curriculum and instruction) served as the representative, rarely was the CEO directly involved in the IOA.

Arrangements with a low formalization rating also appeared in only one subgroup (III.C.). Most with this rating were based only on a memorandum of agreement. In addition, the organizational representation was almost always a program or subunit manager.

Intensity: size of resource investment required for member participation. The two most consistently apparent resources contributed by members were money to support coordination and implementation of joint efforts and staff time to coordinate and participate in joint activities. Although the amount of member dollar contributions for one year ranged from a few hundred to more than $40,000 (for one member), the proportion generally appeared to be quite low when compared to a member's total organizational budget--usually less than 10 percent of that total. In addition, where externally provided funds were in effect the source of member contributions (I.A., I.B., II.A., II.B., III.B.), the contributions did not come from the members' regular operating budgets.

In contrast, the amount of staff time required to carry out IOA activities was generally a high to medium investment. Those rated high (I.A., I.B., II.A., III.A.) tended to require considerable staff time beyond the official representatives' participation in regular IOA meetings. The additional time usually involved the representatives' preparation for the regular meetings and the participation by the representatives and other staff in additional activities such as advisory committees and task forces. Moreover, there were usually several staff members from each organization actively and regularly engaged in IOA-related work (though not always simultaneously). Overall, the high-intensity arrangements tended to require regular weekly, and sometimes daily, involvement of one or more staff members. Not surprisingly, this level of involvement was associated mostly with IOAs supporting mandated improvements so that the IOA efforts were essential to the IOA members.

For the subclasses rated medium in this area (I.A., II.B., III.B.), extra staff time was also required and there were multiple organizational participants. However, the extra time and participation for IOA work appeared to be less frequent and sporadic rather than regular. A low rating (III.B., III.C.) reflects little additional time required beyond regular IOA meetings (usually monthly) and little, if any, additional staff involvement other than the official representative.

Reciprocity: extent of mutual agreement about bases and conditions of exchange. The predominantly high rating on this property was derived indirectly from two features that most of the IOAs had in common. First was the fact that most of the arrangements (86%) were involved in some external requirement or enablement for either the improvement or the arrangement or both. For these IOAs, the mandating or enabling agency specified at least the minimum bases and conditions for the exchange (e.g., the nature of the improvement, the basic features or structure of a supporting IOA, the types of activities or tasks to be carried out as part of the improvement and/or the arrangement). Except in the eight in which both the improvement and the arrangement were mandated, members in all these IOAs were voluntary participants in either the improvement or the arrangement or both. Under these circumstances, IOA participation implied considerable reciprocity among members.

The second feature was the continued voluntary IOA participation by most members, often over an extended period of time. Here, reciprocity was also suggested for most IOAs in subclass I.A. by the fact that even when some members have become eligible to waive the mandate, they have chosen to continue their membership.

Standardization: extent to which units and procedures for exchange are fixed. In the three subgroups rated medium to high (I.A., I.B., II.B.), there appeared to be a roughly even division between units and procedures that were clearly fixed (usually by the external agency) for the duration of the agreement and units and procedures that were open to negotiation or renegotiation by member organizations. For example, the amount of external funding, the limits of member dollar or proportional contribution, and the basic decision-making structures and procedures were among the items generally standardized by the external agency. Changes in these items appeared to be made only rarely and only with approval by the external agency. Other items such as the number and specific topics of workshops or inservice sessions could generally be established and revised at the discretion of IOA members. The single high rating (II.A.) indicates that an estimated 60 percent or more of the units and procedures were fixed. The single medium to low rating (III.C.) indicates that there were about the same number of IOAs with medium standardization as with low standardization. Low standardization is an estimated 40 percent or less fixed items.

Types of coordinating mechanisms. In all the IOAs, one member agency was designated as the coordinating agency for the fiscal matters and/or for managing joint activities and services of the arrangement. In a few instances, there were technically two coordinating agencies, one responsible for fiscal administration and one for activity and service coordination. Without exception, there also was an IOA coordinator or director for the arrangement. In most instances, the coordinator was a staff member in the coordinating agency assigned to the IOA on a part-time basis. Exceptions to this pattern were in IOAs for which the coordinator was also the elected chairperson of the steering committee and the chair rotated each year (II.B., III.C.). However, for numerous arrangements in the mandated category (I.A., I.B.) and the enabled category (II.A., II.B.), there was a full-time coordinator and at least one additional professional staff member assigned to work part-time with the IOA.

Also common to all IOAs was some form of committee which had major responsibility for decisions about IOA activities and services. In addition, many IOAs had both a decision-making committee and one or more advisory committees composed of different sets or groups of IOA participants from member organizations. For example, Teacher Centers (in I.B.) had both a policy board and at least one advisory committee that focused on staff development needs and concerns to be addressed by the IOA. Similarly, special education consortia (in II.A.) had both a citizens advisory committee and a professional development advisory committee in addition to the consortium steering committee. In instances where these consortia were operated as quasi-independent organizations under a joint powers board, there also was usually an advisory committee composed of superintendents of the member districts and county office(s).

Degree of coupling: levels at which linkages occur; multiplicity of ties among members. For five of the seven subclasses, there was a high degree of coupling or interdependence among IOA members. For the mandated IOAs (I.A., I.B.), the coupling was clearly associated with the requirement for formal collaboration. In both of these subgroups, the collaboration was an essential feature of the improvement effort, without which members would either fail to be in compliance with the mandate (I.A.) or would not be eligible for participation in the externally funded improvement program (I.B.). For the enabled subclasses (II.A., II.B.) and the single freestanding subclass (III.A.), the high coupling was not based on an external requirement or on an absolute necessity for collaboration to carry out the improvement; other agencies like the IOA members have engaged in intraorganizational efforts in each kind of improvement program included in these subgroups. However, once the IOAs were formed and the improvements were being jointly carried out, it would be extremely difficult for individual members to withdraw and continue the improvement effort on their own at the same level and pace. Similarly, if more than a few members withdrew, the arrangement as a whole might have difficulty continuing because of reduced resources, particularly human resources needed to carry out the variety of IOA activities in addition to the regular business meetings.

For the two subgroups with medium to low ratings (III.B., III.C.), there were about the same number of IOAs with each rating. The medium rating suggests that, should individual IOA members withdraw, they conceivably could continue the improvement effort but not without some difficulty in realigning resources and/or renegotiating expectations either within their own organizations or with the external agency involved in the improvement effort. A low rating indicates that IOA members would be expected to have little or no long-term difficulty continuing the general improvement effort if the IOA dissolved, although they also might need to renegotiate intraorganizational expectations.

Operations

Formalization: extent of exchange coordination by an intermediary. Although there are doubtless innumerable informal information exchanges that are not coordinated, there appeared to be a generally medium to high coordination of formal exchanges. Examples of items and circumstances of coordinated exchange included: administration of member resource contributions; scheduling, arranging for, and conducting regular and special meetings of the IOA; collecting data for and preparing regular and special reports on IOA work; and arranging for needed additional resources (e.g., consultants) not available from IOA members.

Coordination of most regular exchanges and activities was carried out by the IOA coordinator or another staff member in the coordinating agency; however, IOA members were frequently assigned or volunteered to coordinate exchanges, such as task force work or arranging for outside consultants.

Here a high rating suggests that most formal exchanges were coordinated. The two subclasses that were predominantly high (I.A., II.A.) were those in which the improvement was mandated and the arrangement was either mandated or enabled. This may indicate a need (either real or perceived) for greater coordination as one means of assuring and demonstrating compliance with all aspects of the mandate.

In the three subgroups that were rated medium (II.B., III.B., III.C.), there apeared to be about as many coordinated exchanges as there were uncoordinated exchanges within the IOAs. Since this rating could be applied both to enabled and freestanding improvements and to enabled and freestanding arrangements, no suggestive pattern was apparent.

Intensity: frequency of interaction among members. "Interaction" here denotes formal and informal, coordinated and uncoordinated exchanges among members. A high rating indicates that interaction regularly occurred on a weekly and sometimes daily basis among several different members; and often took place daily between the coordinating agency and different members. The two high ratings (II.A., III.A.) were associated with collaborative efforts that appeared to have the most intensive improvement requirements (special education and occupational programs in II.A. and proficiency assessment standards and tests in III.A.) and perhaps the broadest implications for IOA members.

A medium rating indicates that interaction ranged from regular bimonthly to occasional weekly contacts between members other than the coordinating agency. This rating also included regular weekly and sometimes daily contact between the coordinating agency and other members. A low rating indicates that regular interaction about collaborative efforts appeared to occur mostly in regularly scheduled IOA meetings which were held monthly or less.

Reciprocity: directions of exchange. There appeared to be some periods of time or some specific areas of IOA activities or services in which exchanges were primarily bilateral. Usually such exchanges were between the coordinating agency and another IOA member: for example, when the coordinating agency was collecting data from each member for external reports. However, for all the IOAs, most exchanges appeared to be multilateral with members making exchanges directly with one another as well as with the coordinating agency.

Context: circumstances under which linkage mechanisms are employed. Linkage mechanisms were employed in most formal interactions. Examples were included under extent of exchange coordination.

Outputs

Results of the IOA: direct outputs to members. We identified three kinds of outputs common to all or most IOAs: products (e.g., handbooks, newsletters, reports); services (e.g., programmatic technical assistance); and fiscal administrative activities (e.g., staff development workshops, inservice training sessions). In all of the IOA subgroups there was some mixture of all three outputs, but as the table indicates, there was a greater overall orientation toward services and activities (in that order). Only in two freestanding subgroups (III.A., III.B.) did a product orientation appear to be predominant. The improvement focus, less than or rather than the IOA type, seemed to influence this orientation. For example, the IOAs in III.A. all supported efforts to develop and promulgate proficiency assessment standards, develop and produce item banks, sample tests, and handbooks for administering proficiency tests, etc. Improvement efforts in III.B. included research and technical assistance projects for which research reports and handbooks were intended to be a major result from the outset. A fourth result, compliance with a mandate, was the essential IOA product only for the three subgroups supporting mandated improvements (I.A., II.A., III.A.).

V. CONCLUSIONS AND INFERENCES

Although this was an exploratory study in which no hypotheses were suggested about the extent or nature of collaborative arrangements in education, the data collected in the 13-county study area have produced some surprising findings about the number and variety of arrangements; the frequency with which educational organizations, especially school districts, engage in formal collaboration; and the highly complex nature of connections among some organizations that share multiple IOA memberships. These findings suggest three sets of conclusions and inferences about interorganizational arrangements that support school improvement efforts.

1. There appears to be a multi-faceted network of educational organizations engaged in many and varied collaborative school improvement efforts. In the study area, formal collaboration is a ubiquitous reality. Although individual arrangements may vary greatly in levels or degrees of complexity, the overview of the 103 IOAs suggests a series of multiple layers of highly complex interorganizational structures and interactions.

Neither the full extent nor the existing and potential complexity of such arrangements has yet been fully recognized by most participants in IOAs. Neither have educational IOAs yet been clearly acknowledged or addressed by research on educational organizations or by policymakers. However, the findings from this study suggest that the typical view of educational organizations, especially school districts, as isolated from one another by preference and tradition is inaccurate. In its place must be considered an alternative view in which there is, in general, moderate to frequent formal collaboration in support of school improvement efforts.

2. Most formal collaborative arrangements are established or formalized in response to some external requirement or enabling resource for the improvement effort or for the arrangement or for both. Only 14 of the 103 study area IOAs were freestanding both in the legal status of the improvement effort and in the legal status of the arrangement. If this pattern holds true in other areas, two competing conclusions are suggested.

On the one hand, it can be concluded that educational organizations are highly responsive to external initiatives (usually from federal and state agencies) for improvement and that they actively seek out or respond to opportunities to share resources as well as to seek out and make use of external resources and support. Stated another way, it could be said that federal and state initiatives have been highly successful in stimulating educational organizations, again especially school districts, to engage in collaborative improvement efforts.

On the other hand, it can be concluded that educational organizations demonstrate little interest or activity in collaborative efforts unless some external agency requires the effort and/or provides the primary resource support for such an effort. Viewed in this light, and drawing on the conclusions of large-scale evaluations and studies of previous federally sponsored improvement programs (e.g., Berman, McLaughlin, et al., 1975-1977; Stearns and Norwood, 1975-1977), it can be inferred that a reduction or elimination of external mandate and/or resource support would result in a concomitant reduction or elimination of collaborative improvement efforts.

3. Evidence of both tight and loose coupling between IOA members reinforces the notion that variation in strength of coupling is found in all organizational systems, and in this instance, in interorganizational systems. In general, individual arrangements appear to reflect loose coupling among member organizations. However, in instances where several organizations share multiple IOA memberships, there appears to be a hidden structure of tighter coupling among the organizations.

As background for this discussion, three important points should be made about notions of loose and tight coupling. First, loose coupling does not necessarily indicate a system breakdown in need of repair. Second, as a corollary, tight coupling does not necessarily indicate "good" system operation. The appropriateness or utility of variations in coupling strength may depend on numerous factors, not the least of which is an awareness within or among the organizations of individual variations and of the cumulative nature of multiple instances of either tight or loose couplings.

Finally, it should be noted that actual coupling strength, whether tight or loose, is a matter of degree rather than of absolutes or even of extremes. That is to say, tight coupling, either in individual or cumulative instances, does not necessarily represent inextricable bonds within or between organizations. Neither does loose coupling necessarily represent a total lack of interdependence between or among coupled units. To the contrary, it may well be that the degrees of strength and variations occur within a fairly narrow range and that most couplings, individual or cumulative, are of a moderate strength. The basic point to be made in this conclusion is that both tight and loose coupling exist among IOA members and that the overall coupling among organizations that share multiple memberships may be tighter than the couplings in the individual arrangements would indicate.

The basic notion of loose coupling is that actions taken by one element or agent in an organization bear little predictable relationship to actions of another element or agent in the organization. In applying the notion to interorganizational arrangements, there is a lack of predictability between actions taken by an agent or element in one organization or by the organization as a whole and actions taken by agents or elements in other member organizations or by the other member organizations as larger entities. Loose coupling can be reflected by diverse situations: for example, by a relative lack of coordination within the organization; or in richly connected networks through which influence spreads slowly or weakly.

Across the individual arrangements, loose coupling is indicated by several factors. Within member organizations, it is generally the case that one subunit or individual is responsible for IOA membership and participation. Although the formal agreement is between or among the larger organizations, the most active coupling is really between or among subunits. Each IOA thus involves a relatively few individuals in each organization. Where an organization participates in more than one IOA, a different subunit or individual is likely to be responsible for each membership. Moreover, within member organizations there appears to be a very low level of awareness of the IOA purpose, membership, or activities by organizational personnel other than those responsible for each membership. In fact, in the interviews, it was rarely the case that any single respondent was aware of most or all of the IOAs in which his/her organization was participating. Finally, the most visible resource investment required for individual IOA membership--money--is usually low relative to the total organizational or even subunit budget.

There is contrasting evidence of somewhat tight coupling across individual arrangements and in particular for organizations which share multiple IOA memberships. The couplings discussed here are those which are applicable to most IOAs and do not include the arrangements for which both the improvement effort and the IOA are externally mandated--clearly the strongest form of coupling.

Across the arrangements there are three factors which indicate tight coupling. One is the formal interagency agreement itself which spells out the responsibilities of member agencies and which, in virtually all instances, must be approved at the executive level of each organization and in some instances must be approved by the governing board of each member. Although in most instances the agreements are open to adjustment or renegotiation at specified renewal periods, the agreements themselves represent a formal, official, and binding commitment by the organizations to one another during the period covered by the agreement.

Another tight coupling indicator is the actual investment of organizational resources in the arrangement and the improvement effort it supports. Although the monetary contribution may represent a small portion of the total organizational budget, the accumulation of resources invested--particularly in terms of staff time required for participation and the number of years of repeated investment or exchange--suggests a potentially stronger tie among members than the terms of a single year's agreement would suggest.

Finally, for many IOAs there are additional ties or couplings among members through the various advisory committees. For example, special education consortia have a Citizens Advisory Council and a Professional Development Advisory Committee as well as a coordinating or steering council. Although there may be some overlap in membership, each group is composed of a substantially different group of individuals. Each group represents an additional set of interorganizational connections.

For organizations that share two or more IOA memberships, the multiplexity of ties contribute to even tighter connections. Not only are there multiple IOA memberships, the connections themselves frequently are among different subunits and at different organizational levels so that the ties are more widely distributed within the member organizations and the ties between member organizations occur at multiple organizational levels. In addition, the collaborative improvement efforts themselves have different foci so that members are coupled in multiple substantive areas. Finally, although the resources invested or exchanged in each IOA may be relatively small, the cumulative resources exchanged among members may be considerably more substantial. These tight couplings tend to be hidden from or unrecognized by most participants due primarily to the looseness of the individual couplings (e.g., the lack of awareness of multiple memberships, and the relatively small individual resource investments).

VI. IMPLICATIONS FOR RESEARCH

The principal orientation of this study was to provide a first level of descriptive and analytic information about collaborative arrangements that can be used by policymakers to develop a clearer understanding of such arrangements as vehicles for supporting educational improvement efforts. Similarly, the primary focus of research implications is on topics which can address policy issues and concerns. These implications are presented as discussions of a series of five questions.

1. Under what circumstances are formal collaborative arrangements most appropriate to support improvement efforts, or more appropriate than non-collaborative arrangements or informal collaborative arrangements? Neither this study nor the other three NIE-supported studies of IOAs (Havelock, et al., 1981; TDR Associates, 1981; Yin and Gwaltney, 1981) adequately address this question. This study provides an overview of the number and variety of arrangements that exist in a limited area. The other three studies focus on a limited number of exemplary arrangements (three each). Most other studies that focus on or include examinations of IOAs in education also fail to address this question.

In addition, Whetten (1981) has pointed out that in the larger field of interorganizational relations "most authors assume that the most problematic aspect of coordination is that it does not happen as often as it should" (p. 20). He also suggests three possible dysfunctional consequences of coordination that require further investigation in order to "provide a balanced perspective for evaluating the benefits of interorganizational coordination."

The first consequence he suggests is "that tighter systemic integration reduces adaptive potential" (p. 21). In other words, increased couplings among member organizations, especially multiple couplings, may reduce the ability of members to simultaneously maintain linkage with other members and respond adequately to changes in their respective environments.

The second is that "joint programming may reduce program innovation" (p. 21) for two reasons. One is that the greater diversity there is among the backgrounds and orientations of member organizations, the greater difficulties there may be in establishing a common understanding of the program purpose, a common set of working assumptions, and mutual trust. As a result, participants may search for safer, even mundane, solutions. The other reason is that jointly sponsored programs are often subject to substantial political bargaining and different "hidden agendas" for member participation. The result of negotiation and compromise is likely to be a safe or "watered down" version of the initial program idea.

The third possible dysfunction is that "extensive coordination may reduce the quality of services provided by the network as a whole" (p. 22) by preventing or making it more difficult for other organizations, technologies, and ideologies to enter the arena. Thus, the status quo--the "safe" program--is reinforced.

It should be noted that these dysfunctions are derived from the systems view of organizations prevalent in the general literature of interorganizational relations and that they therefore assume a moderately tight coupling within organizations participating in IOAs. In consequence, it could be argued that these particular dysfunctions have only limited applicability to arrangements among educational organizations which are increasingly held to be loosely coupled internally.

In contrast, it also could be said that the applicability of any particular dysfunction is a moot question until the larger issue of dysfunctional consequences of collaboration is adequately acknowledged and tested. In this view, the possibilities raised by Whetten suggest a starting point for identifying and testing dysfunctional consequences of educational IOAs.

In speaking of public policy research and implementation, Cantley (1981) has said that in politics, policies are the hypotheses which must be tested to destruction. It might be said here that collaborative arrangements, especially those required or enabled by external agencies, represent already-established policies and hypotheses which must be thoroughly, if not destructively, tested. One immediately apparent approach to such a test is to compare and contrast the structure, processes, and results of similar improvement efforts that are conducted with and without the support of collaborative arrangements. There are many improvement efforts such as Teachers Centers, special education projects, and proficiency assessment projects that include numerous examples of both collaborative and non-collaborative approaches to implementation which can provide a starting point for comparison and contrasts.

2. What, if any, are the critical distinctions between externally supported and freestanding collaborative efforts in areas other than the legal or externally supported status of the improvement project and the arrangement? Within this general question reside a number of important smaller questions about potential differences in the nature of the different types of interorganizational relationships. In addition

to the readily apparent differences in resource availability, what differences occur in the structure and operations and results of the efforts? Do criteria or procedures set by external agencies impede or enhance cooperation? Are the parameters of autonomy, authority, and responsibility for each organization clarified or clouded by the presence or absence of external support, monitoring, and requirements? Do freestanding arrangements result in longer-term interorganizational relationship than externally supported arrangements?

Answers to questions such as these could provide useful insights into the efficacy of externally mandated or enabled IOAs. Again a comparative analysis is the suggested approach. Teacher Centers can again be suggested as one readily identifiable form of collaborative effort that exists in both externally supported and freestanding circumstances. In addition, the intermediate service agencies identified in Stephens (1975), Hood (1978), and Stephens, et al. (1979) can be divided roughly in half between externally required or supported arrangements and freestanding cooperatives. Clearly, in these two instances there is no lack of comparative subjects.

3. What factors contribute to useful continuation of formal collaborative efforts when external support or requirements are reduced or eliminated? In many instances it appears that one intent of external support has been to build or encourage collaborative capacity and commitment among IOA members as part of the overall improvement effort. Yet there is little evidence to suggest that collaborative efforts continue effectively when external requirements or resource support are reduced or eliminated. In contrast, there is substantial past and present evidence that interorganizational priorities and levels

of support or emphasis on compliance for various improvement approaches shift with changes in state and federal political administrations and with changes in economic conditions. It seems logical and prudent to identify continuation factors and then pay special attention to those factors when prescribing or enabling collaboration.

It should be emphasized here that useful continuation is the key concern of this question. As previously noted, the mere fact that collaboration per se continues, endures, or is institutionalized cannot necessarily be equated with utility or effectiveness. To the contrary, Whetten has implied that transitory IOAs may be more functional than enduring ones, if for no other reason than that they can be established to meet important but temporary needs and discontinued with relative ease when the needs have been satisfied or no longer exist. In fact, repeated participation in highly focused, transitory arrangements may reflect greater intraorganizational adaptability and initiative and greater collaborative capacity on the part of participants than would be demonstrated by their continued membership in an enduring arrangment in which the central purpose periodically shifts.

4. What are the "natural" variations in coupling within and among educational organizations engaged in collaborative improvement efforts? Most theories about interorganizational relations are based on notions of tight coupling and coordination of resources and exchange. They are drawn primarily from similar normative theories of intraorganizational structure and behavior. In contrast, at least some evidence from this study points to a more appropriate emphasis on developing theories which focus on the patterns of variation in coupling strength within and between organizations.

Some subsidiary questions are: Under what circumstances do different coupling patterns occur? Under what circumstances do the patterns shift? What, if any, connections are there between loose or tight coupling within IOA member organizations and loose or tight coupling among member organizations?

5. What factors contribute to the tendency of some educational organizations to repeatedly join in or lead the formation of collaborative arrangements as opportunities arise or change? The between-county findings that IOA participation by school districts and county offices of education appears to be influenced by a county's population, public school enrollment, and larger IOA activity suggest some contributing contextual factors that also may be applicable to other types of organizations. However, these findings do little to explain differences in the frequency of IOA participation by organizations of the same type within the same county (e.g., differences between the seven Santa Clara County districts that participate in four IOAs and the six districts that participate in eight IOAs). Such differences suggest the presence of intraorganizational variations that influence different levels of IOA participation. From the research point of view, identification of contributing factors can increase our understanding about the nature of collaboration among educational organizations in general and about the nature of collaborative activity by individual organizations.

From the policy viewpoint, identification of contributing factors may make it easier for external IOA sponsors to assess the likely response of types of organizations and/or individual organizations. In addition, answers to this question may be useful to intraorganizational policymakers in identifying factors which they can influence or control to increase or decrease collaboration activity by their own organizations.

VII. IMPLICATIONS FOR POLICYMAKERS

In addition to the policy-oriented research questions considered in the previous chapter, there are several policy issues and implications which deserve more immediate attention. These issues and implications are derived from three major findings of the study and two likely continued or future conditions related to the resource context for education in general and collaborative improvement efforts in particular:

- Study findings
  - Apparent proliferation of collaborative arrangements.
  - Marked differences in organizational combinations in the different IOA categories.
  - Heavy reliance on external resources for IOA support.
- Likely resource conditions
  - Continued reductions in federal and state resources for education.
  - Proposed consolidation of federal education programs.

As with the research implications, the policy implications are organized as discussions of a series of three questions.

1. What are the possible consequences of the proliferation of collaborative arrangements? On the positive side, the widespread use of IOAs may indicate that educational agencies in general, and local districts in particular, have made and will continue to make substantial progress in achieving the basic purposes of collaboration: reducing unnecessary duplication of effort, and extending or multiplying resources. In turn, this progress may represent an increased capacity for implementing costly and complex improvement efforts such as expanded special education programs and proficiency assessment standards.

On the negative side, there are two levels or areas of possible consequences. First, there are the possible negative aspects of coordination itself. Whether the dysfunctions are those suggested by Whetten or others peculiar to educational IOAs, to the extent that any negative aspects of coordination do exist equally or predominantly in individual IOAs, the negative aspects are multiplied as a consequence of proliferation.

Second, the proliferation of IOAs may represent an additional form of unnecessary duplication of effort and of resources. Elsewhere in this report it was noted that many organizations appear to be unaware of their multiple IOA memberships, the potential relationships between the improvement efforts supported by the IOAs, and the potential duplication of resources invested and/or exchanged in the multiple IOAs. The numerous collaborative arrangements sponsored by state and federal agencies suggest a similar lack of awareness and coordination of resources by the sponsoring agencies themselves. Where these circumstances prevail, they are likely attributable to the fact that primary attention is given to the substantive or programmatic aspects of the various improvement efforts, and secondary attention is given to the collaborative mechanism that supports the program implementation. That is, each improvement effort is thought of first as a staff development program, or a Teacher Corps project, or a special education program, etc., and only second or perhaps third as a collaborative program or project.

2. What factors may contribute to the marked differences in combinations of organizational types that support the different classes of improvement efforts? In the earlier census sections it was pointed out that there were two most-likely organizational combinations for mandated improvement efforts--school districts only, or school districts and county offices of education. In contrast, there were at least seven different likely organizational combinations that support free-standing improvement efforts and at least 10 different combinations supporting enabled improvement efforts. Although there might be different patterns of organizational combinations in a national census* of collaborative improvement efforts, the difference here between the limited combinations for mandated efforts and the much broader combinations for the other two classes of improvement efforts suggests some broader implications.

One contributing factor appears to be a function of "who can mandate whom and what." Only state and federal legislatures and courts have mandating authority over a wide range of organizations, both public and non-public, educational and non-educational. State departments of education and state boards of education can usually impose requirements only on public school districts and county offices. County offices and school districts rarely have authority to place requirements on any other agencies. Statewide systems of higher education can usually impose mandates only on the colleges and universities in the system; individual colleges and universities rarely, if ever, can place requirements on any other agencies.

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* There would be differences in at least three other states where IHEs are required to participate in some school improvement efforts. In Florida and Texas, the state legislatures have required IHEs to collaborate with districts in Teacher Centers. In Boston, Massachusetts, a federal court has ordered IHE-district pairings for general school improvement efforts supporting school desegregation.

Another possible factor is that school districts are the primary targets of school improvement programs and requirements. That is, the improvements usually must be demonstrated by districts but not by other types of educational organizations. It may be that mandating agencies focus on district-level improvement to such an extent that they overlook the possibility that requiring participation by other types of organizations might strengthen or facilitate the required improvement effort.

Whatever the relative weight of these factors, the result is that, in this study, almost no organizations participated in mandated improvement effort collaboratives unless they were affected by the mandate. It would appear that where participation of organizations other than districts and county offices is essential or desirable, those organizations also must be required or affirmatively enabled to participate.

3. How can state and federal policymakers continue to promote collaborative efforts given: (a) the heavy reliance on external resources for IOAs, and (b) the almost certain reduction in state and federal resources for education over the next few years? Within the four externally based subclasses of IOAs, a variety of existing policy strategies are suggested.

a. Specify collaboration as acceptable or preferred implementation means. At a minimum, IOAs can be encouraged by specifying collaboration as one acceptable or preferred means for implementing an externally supported or required improvement effort. Although this approach seems almost facile, the largest percentage (42.7%) of the study area IOAs (the enabled category) were related to this strategy. It appears that simply identifying the possibility of collaboration focuses actionable attention on this means of supporting improvement. In addition, the types of organizations eligible or acceptable for participation can be clearly identified.

b. Require collaboration as part of improvement effort. At the opposite extreme, collaboration can be required as part of an improvement effort, whether the improvement effort itself is required or enabled. The study findings suggest that this strategy has been employed primarily in order to promote collaboration among particular combinations of organizational types (e.g., school districts and IHEs in Teacher Corps projects). In a recent report on similar IOAs, Yin and Gawaltny (1981) emphasized that such requirements must take into account congruency between or among the organizational types required to participate.

c. Establish pattern of decreasing external funds and increasing member funds. Between these extremes, one important approach to ensuring continuation is suggested by a particular collaborative effort, the Professional Development and Program Improvement Centers (PDPICs) sponsored by the California State Department of Education. Two premises underlie this general program. First, IOA members must consolidate or coordinate funds and activities in similar improvement efforts whatever the source of support. Second, member contributions are required to increase as state funds decrease in each year of the award. Thus, the state funds serve as a start-up incentive for member participation, but members are aware of and must be committed in advance to building a nearly self-sustaining collaborative effort. An additional advantage is that the improvement effort itself is voluntary so that members "self-select" their own participation in the program and, by extension, select their own partners. A variation on this approach would be to require the IOA members as a group to match the external funds in the initial period and then follow the decreasing external/increasing member funding pattern.

d. Build on existing arrangements. Policymakers can build on existing arrangements in two ways. One is to identify and publicize exemplary freestanding arrangements as models for other collaborative efforts. Another is to use existing IOAs as the base for new externally sponsored collaborative improvement efforts. For example, a new staff development program might be implemented through existing staff development networks and Teacher Centers. The program could be incorporated directly into mandated and enabled IOAs. In addition, the program might be "offered" to previously freestanding IOAs. This approach could reduce the time and cost of implementing new programs. Finally, with more flexible (though reduced) funds at the state level as a likely result of proposed block grants, state-level agencies might continue exemplary collaborative efforts previously supported by federal resources.

APPENDIX:

CHARACTERISTICS OF CLASSES OF ARRANGEMENTS

APPENDIX: CHARACTERISTICS OF CLASSES OF ARRANGEMENTS

In this section, descriptions of the characteristics of each subclass of arrangement are presented in the order of the three major IOA categories. The two subclasses of mandated arrangements are described first; the two subclasses of enabled arrangements are presented second; and the three subclasses of freestanding arrangements, third. The format for the descriptions is the descriptive analytic framework presented in the logical structure (see Figure 1). In the descriptions, primary attention is given to the relational properties of the interorganizational arrangements. The five dimensions and the relational properties for each are as follows:

- History

  Circumstances that led to the IOA.

- Context

  General cooperative environment: emphasis/support for collaboration external to the IOA.

  Resource availability: number and types of resources external to member organizations.

- Structure

  Formalization: degree of official agreement given to the exchange by member organizations.

  Intensity: size of resource investment required for membership.

  Reciprocity: extent of agreement about bases and conditions of exchange.

  Standardization: extent to which units and procedures for exchange are fixed.

  Types of coordinating mechanisms.

  Degree of coupling.

- Operations

  Formalization: extent of exchange coordination by an intermediary.

  Intensity: frequency of interaction among members.

  Reciprocity: directions of exchange.

  Context: circumstances under which coordinating mechanisms are employed.*

- Outputs

  Results of the IOA: direct outputs to members and clients.

The emphasis in the descriptions is on characteristics shared by most or all of the arrangements in each subclass, but the major variations also are described briefly.

I. MANDATED ARRANGEMENTS

In this category, the arrangement itself is required by an agency external to member organizations. The mandating agency may be a governing or administrating agency, a legislative body, or a judicial agency. Improvement efforts supported by mandated IOAs may be mandated (I.A.), enabled (I.B.), or freestanding (I.C.). However, no mandated IOAs supporting freestanding improvement efforts were identified in this study.

I.A. Mandated IOA-Mandated Improvement Effort

There are eight arrangements in this subcategory, all of which are associated with the same improvement effort known as the Consolidated Application Program. The arrangements themselves are referred to collectively as Consolidated Application Cooperatives.* The mandate source for the arrangements and the improvement effort is the California State Department of Education (CSDE). The size of the arrangements ranges from two to 23 members. The smallest is composed of two school districts. Six include several school districts and one county office each. One of these six also includes one district in a contiguous non-Bay Area county. The eighth cooperative includes two Bay Area county offices and qualifying school districts in the two counties.

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* In the framework, this property was listed separately. However, in the following descriptions, it is covered under formalization.

History

Circumstances that led to the IOA. In 1972, the CSDE established the Consolidated Application Program to pull together and simplify application procedures for several federal and state funding sources. The program serves as a means by which school districts can use a single application for any or all of the sources covered by the program. All school districts are required to use this procedure. In addition, the program requires that districts receiving less than $75,000 total (in 1979-80) from the Consolidated Application sources participate in cooperative arrangements with other districts and/or with a county office.

The purpose of the cooperative is to provide essential administrative and fiscal services for small districts that do not have full-time district administrators other than the superintendent. One member is selected as the responsible local agency (RLA) and assumes responsibility for providing or coordinating fiscal and administrative services to member agencies. The cooperative, under the auspices of the RLA, then applies as a single unit for the Consolidated Application funds. The RLA has the same responsibilities as a large district office for ensuring compliance with the application procedures and with requirements of the programs from which member agencies receive funds.

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* Although these cooperatives are the only IOAs identified for this subcategory in this study, they are not the only example of mandated IOAs supporting mandated improvement efforts. Examples in other states include Boston IHE-school district pairings mandated by a federal court as part of a desegregation ruling, IHE-school district teacher centers mandated by state legislatures in Texas and Florida, and legislatively required intermediate service agencies in several states.

In 1979-1980 there were seven programs included under the application. Three were federal programs. Title I of the Elementary and Secondary Education Act of 1965 provides funds for educational programs designed to benefit low-achieving students from low-income families. Title IV-B (ESEA, 1965) provides support for instructional and library materials. Title IV-C (ESEA, 1965) supports innovative projects in some schools. Four of the programs were authorized and funded by the state legislature. The Miller-Unruh Basic Reading Act of 1965 provides funding for reading specialists to develop and direct elementary school reading instruction programs aimed at the prevention and correction of reading disabilities. The Preschool Education Programs are intended to provide a high-quality educational program with strong parental involvement for disadvantaged children from age three through the age at which they are eligible to enter kindergarten. The State Compensatory Education Program provides funds to cover the excess costs for services to educationally disadvantaged students.* Funds from AB 551, Article

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* Some funds in the State Compensatory Education Program also are set aside for bilingual services to students with limited proficiency in English. As part of the Consolidated Application agreement, districts that receive these funds must allocate (on a formula basis) a portion of the funds to provide such services.

I, provide assistance for local staff development programs. Under the California School Improvement Program (AB 65, 1977) funds are allocated to districts for the purpose of improving overall school programs.

Context

General cooperative environment: emphasis/support for collaboration external to IOA members. For these arrangements, direct external emphasis on collaboration comes primarily from the CSDE in the form of the requirement. However, indirect support in the form of funding comes from both the state and federal programs covered by the Consolidated Application Program, since it is a portion of these funds which members contribute to the RLA to cover at least some coordination costs. A more general and pervasive support for collaboration also comes from the CSDE through the several state-level programs which either require or encourage some form of collaboration and through the general CSDE philosophy that emphasizes cooperative improvement efforts.

Resource availability: number and types of resource sources available to the IOA. For the programs covered by the cooperative application, resources are derived from the federal and state program funds for which members are eligible (each member does not necessarily receive funds from all seven programs). Individual members or the cooperative itself can call on the assistance of CSDE consultants. However, most of the resources are provided through the cooperative itself, either from the RLA (especially for administration and fiscal services) or from services shared or exchanged by the members themselves.

Structure

Formalization: degree of official agreement given to the exchange by member organizations. There are two types of formal agreements for the cooperatives. One is the Consolidated Application itself which is a legal contract directly between the cooperative (and indirectly between each member) and the CSDE. This contract concerns the eligibility of cooperative members for funding and sets forth compliance requirements for each program. Prior to 1978, the application itself and a description of services to be provided by the cooperative served as the formal agreement. Since 1978, the CSDE also has required an interagency agreement between the coordinating agency and each cooperative member. This agreement concerns the services to be provided by the RLA, the amount of the member's fiscal contribution to the RLA for coordinating cooperative services and activities, and the duration of the contract (usually one year). This contract must be approved by the superintendent and board of each member organization.

Intensity: size of resource investment required for membership. The RLA is allowed by the procedures covering the cooperatives to assess each member organization a percentage of the member's total funding from the programs to cover costs of coordinating the cooperative. The actual percentage is related to the operating costs of the cooperative office and the total funds generated by the funding sources. (In these eight co-ops, the range was between one percent and 10 percent.) Thus, although the contributions come from the external program funds, they are deducted from each member's share of funding. No additional funds are provided for the arrangement itself by the CSDE or the state or federal programs. Members also contribute staff time for participation in cooperative activities (e.g., staff development workshops) and in-kind services (e.g., facilities for cooperative meetings and activities).

Reciprocity: extent of agreement about bases and conditions of exchange. The basic terms of the exchange are specified in the CSDE requirement that established the arrangements: that is, the size and funding level of district participants; the range of contributions allowed to support the RLA's coordination activities; and the general areas in which services are to be provided to members. However, many of the specific services and activities to be conducted each year are determined by the cooperative members. For example, they can determine the number and topical foci of workshops and inservice sessions, and the types of information and materials they want to develop as a group or have provided to all members. Agreement about these activities and services is reached either through discussions in advisory committee meetings or through a needs assessment conducted by the coordinator.

Standardization: extent to which units and procedures for exchange are fixed. The basic terms are fixed by the CSDE requirements and cannot be adjusted by cooperative members themselves. The specific activities and services agreed upon by members generally are fixed only for the period covered by the interagency agreement (usually one year) and can be changed from one contract period to the next. During the contract period, members can negotiate changes in the activities and services they have specified.

Types of coordinating mechanisms. In this group of arrangements, there is a single type of coordinating mechanism. One of the member organizations is designated as the coordinating agency. In seven of the eight cooperatives, the county office is that coordinating agency; in the other, a school district has this designation. For each there is a director, hired by and located in the designated agency, who is responsible for coordinating all the cooperative resources, services, and activities. Member organizations retain autonomy over their own programs. In three of the eight cooperatives, the director's role is a full-time position; in five, the directors also carry other roles. In addition to the director, there are usually other coordinating agency staff who have part-time cooperative responsibilities (e.g., project secretary, business office staff member). The costs of staff salaries, supplies, travel, and meetings are covered primarily by the contributions of the member organizations. However, the coordinating agency also may contribute some resources such as additional staff time and space, facilities for meetings, etc.

A Cooperative Advisory Committee composed of representatives from each member district is required. State regulations about district representation on the committee follow the laws covering federal programs included in the Consolidated Application Program. For example, to meet the intent of Title I requirements, the majority of Cooperative Advisory Committee members must be parents of students who receive Title I services. A minority of committee members may be drawn from administrators, teachers, teacher aides, or community members. The cooperative director is responsible for "maintaining" the committee, which includes coordinating and conducting committee meetings and the general operation of the committee.

Degree of coupling. Linkages among member organizations in the cooperative occur at several levels. One linkage is at the level of the superintendent and board who must approve each year's contract. Another is at the level of the advisory committee representatives. A third level includes the variety of administrative participants in the cooperative activities such as workshops and inservice sessions.

In addition, in all eight cooperatives, virtually all districts share at least one additional IOA membership with other cooperative members, whether they are districts or county offices. In many instances, districts have three or four other IOA ties. Every county office is in another IOA with cooperative districts, and most are in three or four other arrangements.

Another linkage or bond is the IOA requirement itself. As long as member districts have less than the specified minimum funding level, they must remain in the cooperative. A member school district can withdraw if its funding exceeds the specified level; however, in several cases, districts have chosen to remain in the cooperative long after they have become eligible to withdraw.

At yet another level, the linkages among the cooperative directors are strong and frequent. Formal statewide meetings or workshops and informal personal interactions nurture this cooperative directors network. Although the linkages among member organizations are only indirect in this case, the co-op directors themselves are important information resources for all members of their cooperatives.

Operations

Formalization: extent of exchange coordination by an intermediary. Most of the formal exchanges among cooperative members are coordinated by the director or by another cooperative staff member. Some examples of these exchanges are: preparation and submission of all necessary and required reporting and compliance documents; workshops on management facilitation for district project administrators and coordinators; inservice training sessions for the Cooperative Advisory Committee, District Advisory Council, and school site councils; pre-program reviews for schools and districts scheduled for CSIP reviews; and curriculum planning meetings and workshops.

Intensity: frequency of interaction among members. Interaction among member organizations occurs in several modes which, taken together, indicate very frequent contacts among member organizations. For example, there are generally three to four Advisory Committee meetings each year in which all or most of the IOA members are represented. In addition, there are usually at least three workshops each year, each of which typically includes representatives of member organizations other than the Advisory Committee representative. In some instances, there were two or three workshop series, each targeted to a different group of organizational representatives (e.g., project directors, curriculum planners). The workshops can provide from three to 10 separate interaction occasions each year.

There are also regular contacts between the coordinating agency and each member for fiscal management and reporting purposes (usually monthly) and between the director and individual members for consultation on a variety of cooperatives-related topics (almost daily). Several forms of non-personal communication also occur: minutes of committee meetings, evaluation reports, fiscal and management reports, resource documents, etc.

Reciprocity: directions of exchange. Some exchanges directed primarily from the coordinating agency to members have been indicated in the previous sections. In addition, there are numerous formal exchanges from the member organizations to the cooperatives and to other members. For example, member districts must provide all necessary application information to the coordinating agency; must develop school- and district-level budgets for each program for which they are eligible; and must develop ongoing evaluative plans to cover consolidated programs. In addition, representatives of member agencies frequently assist one another in preliminary reviews or evaluations of programs covered by the Consolidated Application. In doing so, they provide critical assistance in improving one another's programs and in assuring compliance with program requirements prior to formal external reviews. Moreover, exchanges of ideas and information take place in the workshops, meetings, and inservice sessions.

Outputs

Results of the IOA: direct outputs to members and clients. Direct outputs from the cooperative to member organizations include the services and activities conducted or administered by the coordinating agency: administration and fiscal services; planning and program assistance; staff development activities; and evaluation assistance. In a few instances, a new program or service for member organizations has been established as a result of needs identified through the cooperative exchange. For example, under the auspices of one cooperative, a new position to coordinate bilingual education services to and among member districts was established in the coordinating agency. These services included providing inservice training for administrators, teachers, and aides; acquiring materials; and providing information and consultation about legal mandates covering bilingual education. For the first year, the position was supported entirely by funds from the cooperative districts (i.e., funds contributed over and above the districts' contributions to the cooperative itself). Now the coordinating agency is gradually incorporating the position into its own operations and budget.

The two most important outcomes for members are compliance with the IOA requirement and the availability of critical services--ones without which members could not perform basic operational functions and effectively meet overall program and administrative requirements.

I.B. Mandated IOA-Enabled Improvement Effort

There are 27 IOAs in this subclass and five different improvement efforts. Six IOAs are part of federally sponsored Teacher Corps projects. Thirteen are associated with the Responsive Education Program, also federally sponsored. Two support state-enabled Professional Development and Program Improvement Centers. Five are part of a Mathematics, Engineering, Science Achievement (MESA) program which receives substantial external support from foundations, businesses, and public agencies. The remaining IOA is part of a project sponsored by businesses and public agencies to provide Special Teacher Resources for the Arts (SPECTRA).

Twelve of the 27 are intercounty IOAs; four are intracounty; and 11 are interstate. The membership size ranges from two to 93 agencies. School districts participate in all 27 arrangements while county offices participate only in two. A single R&D agency is in 13, and IHEs are in

13. Non-education agencies participate in two of these arrangements. The two most frequent combinations of organizational types are districts and IHEs (12) and districts and R&D agencies (13).

History

Circumstances that led to the IOA. There are five improvement programs in this subclass. Brief descriptions of each program's history, purpose, and collaboration requirements are given as background for the description of the supporting IOAs.

Teacher Corps Program. The Teacher Corps Program was established by the federal Higher Education Act of 1965

> to strengthen the educational opportunities available to children in areas having concentrations of low-income families, to encourage colleges and universities to broaden their programs of teacher preparation, and to encourage institutions of higher education and local education agencies to improve programs of training and retraining for teachers and teacher aides. (Eckenrod, Hering, and Rosenau, 1980, p. v)

A 1976 amendment increased the emphasis on demonstration, documentation, institutionalization, and dissemination of the results of Teacher Corps projects. Each project involves a collaborative arrangement between one school district and one institution of higher education.

Projects are funded primarily by grants from the U.S. Department of Education which are awarded for two- to five-year periods and which are potentially renewable through application in regular funding cycles. There have been 13 funding cycles since the program was established. It is possible that some projects have existed continually for the 16 years since the program began. Four of the six projects began in the mid-seventies. Two received grants in the 1979 funding cycle.

Responsive Education Program. This elementary-grade program was initiated in 1968 by the U.S. Office of Education to support Project Follow Through. The Follow Through Project was authorized under the Economic Opportunity Act of 1964 (Title II) as a national research, development, and evaluation program intended to design and validate varying approaches to the education of disadvantaged children. The goals of the Responsive Education Program itself are to support healthy self-concept, cognitive development, and cultural pluralism. The program is implemented through staff development training with teachers and administrators involved in Follow Through Projects. All 13 of the IOAs have been in existence since the program was established in 1968, and the members of each have been involved in a Follow Through Project since its inception. Each IOA consists of an R&D agency (the same agency for all 13 IOAs) and one school district.

Professional Development and Program Improvement Centers (PDPICs). These centers were first authorized by the California legislation in 1968 under the Professional Development and Program Improvement Act which was amended in 1974 by AB 4151. The purpose of the legislation was to support inservice training programs "to strengthen classroom instructional techniques in reading and mathematics in kindergarten and the elementary grades by involving school district personnel and student teachers from higher education institutions in pertinent training programs" (CSDE, 1979a, p. 764). Over the years CSDE policy has encouraged PDPICs to expand their programs to include administrators and intermediate and high school teachers. Funds awarded to school districts and county offices to implement the centers are supplied in a declining pattern to encourage the integration of all other available funds and resources related to teacher training. Funds are awarded on the basis of competitive applications. In addition, collaboration with at least one IHE is required for approval of PDPIC implementation.

Mathematics, Engineering, Science Achievement (MESA). The MESA collaborative program differs from other IOAs in this study in two principal ways: the program was designed by a small group of IHE faculty and administrators and then proposed for foundation support rather than having been developed in response to an RFP; and the IHE involvement comes from departments of science, engineering, and mathematics rather than from schools, colleges, or departments of education. MESA's purpose is "to increase the number of under-represented minorities in the mathematics, engineering, and physical science-related professions" (MESA, 1980, p. 1). Through university-based centers and school-based activities and programs, participating high school students receive help in preparing for college majors that require math and science skills and course prerequisites. Some of the MESA activities include: tutoring and study groups, academic counseling, college selection counseling, summer enrichment programs, scholarship incentive awards, and career information.

MESA was designed during 1968 and received initial foundation funding in 1969. The first program began in 1970. Since that time, external funding sources have been expanded to include additional foundations and numerous businesses. Many businesses and several public agencies also provide support through sponsorship of field trips, summer jobs, and volunteer tutors. The universities that sponsor MESA centers also provide funding support.

Of the five MESA arrangements in this study, one is the umbrella IOA for the statewide programs. It was established when the program received its first funding in 1969 although the present structure and widespread membership has evolved since that time. The other four arrangements are IHE-based centers, each of which includes one or more school districts. It should be noted here that MESA "counts" its members in terms of participating schools rather than districts. However, the district must agree to the school involvement and does provide some support as well as encouragement. Of these four, one was the first center established in 1970; two were initiated in 1977; and one in 1979.

Special Teacher Resources for the Arts (SPECTRA). As with MESA, this arrangement differs considerably from most other IOAs in this study. As its name suggests, the program's purpose is to provide resources for teachers to use in art-related classroom activities. The participants are six elementary school districts, a county office of education, one IHE, and one private non-profit organization which initiated and provides coordinating support for the program. This organization is comprised of municipal governments and the county board of supervisors. The SPECTRA program receives funding from the parent organization, the county office, and from contributions by non-member private businesses. Participating districts also contribute funds. SPECTRA was established in 1977 as a response to Proposition 13 funding cutbacks that resulted in substantial decreases or elimination of district resources for arts programs.

Context

General cooperative environment: emphasis/support for collaboration external to the IOA. In addition to the requirement of IOA membership for participation in the programs and the general emphasis on collaboration in California, the five programs and their associated arrangements receive support for collaboration from various external sources. For example, the national Teacher Corps Program is endorsed by the American Association for Colleges of Teacher Education. In addition, the federal Teacher Corps Program Office has funded numerous projects that provide research and support services to local Teacher Corps projects (e.g., Exceptional Child Demonstration Program, Development Training Activities). Moreover, until quite recently, there were 12 regional Teacher Corps Networks for which the national office provided separate funding and support.

Resource availability: number and type of resources external to member organizations. The primary external resources for these arrangements are covered in the descriptions of the history of each program.

Structure

Formalization: degree of official agreement to the exchange by member organizations. There are two major forms of IOA agreements in this subcategory: jointly submitted proposals to the external sponsoring agency, and memoranda of agreement between or among member organizations. They have in common the fact that multiple levels of approval are required and that almost all must be endorsed by the chief executive officer. They differ in that joint proposals are agreements both among members and between members as a group and the external agency, while memoranda represent agreements only among IOA members. An additional indicator of formalization is a fiscal commitment by member agencies to the collaboration effort both in the agreement and/or as an item in the member organizations' budgets. Most of these IOAs reflect both types of budgeting commitments.

Intensity: size of resource investment required for membership. Most of these IOAs involve some direct fiscal contributions in addition to in-kind goods and services. The amounts range from a few hundred dollars for some PDPIC members to as much as $41,000 for some MESA members (1978-79 estimate). In general, the per-member dollar contributions in state and federally sponsored IOAs (Teacher Corps, Responsive Education Programs, PDPICs) are smaller than those in IOAs sponsored by other types of organizations (MESA, SPECTRA).

Reciprocity: extent of agreement about bases and conditions of exchange. For these IOAs, many of the bases and conditions are defined by the nature and structure of the enabled improvement effort which are determined by the sponsoring agency. For example, the kind and amount of member resource contributions may be specified, the general types of activities may be described, and the responsibilities of member agencies may be spelled out in considerable detail. As a result, initial participation in the improvement effort indicates basic agreement about the IOA exchange.

Other features of the exchange (e.g., the topical foci of workshops) can be determined by the members. Agreements about these features are signified by continued participation.

Standardization: extent to which units and procedures for exchange are fixed. The terms defined by the sponsoring agency usually are subject to little, if any, change by IOA members. However, member-negotiated units and procedures can be modified through discussions or negotiations of the steering committee. Substantial modifications in scope of work for jointly submitted proposals usually require approval of the sponsoring agency. For example, content of specific courses conducted as part of a Teacher Corps project could be changed by member agreement. Drastic reduction or elimination of coordinated programs or courses would require external approval.

Types of coordinating mechanism. All the arrangements have a project director or coordinator who has primary responsibility for coordinating formal communications and joint activities. However, there are two distinct decision-making mechanisms. In one the project director, with input from one or more advisory groups, has general decision-making authority for policy and operating decisions within the limits of the formal agreement. Responsive Education Programs, MESA projects, and SPECTRA have this kind of mechanism. The other mechanism is a policy board which usually operates under some form of bylaws. In general, the policy board, again with advisory committee(s) input, directs the program's operation, and the project director administers the program. Teacher Corps projects and PDPICs are governed in this way.

Degree of coupling. In these arrangements, member organizations cannot participate in the improvement effort without participating in the IOA. This requirement for IOA participation provides a strong coupling for the improvement effort itself within each organization. In addition, there are couplings at different organizational levels and among different groups of individuals who participate in collaborative activities. For example, there is the organizational coupling represented by the formal agreement and a subunit coupling represented by the IOA structure and operation. The latter coupling is exemplified by the participation of various organizational delegates on steering committees and advisory boards. Numerous other couplings occur among individuals, usually teachers, who participate in IOA activities such as workshops and seminars. In 12 of the 27 arrangements, some members have at least one other IOA tie. In the other 15, no other ties were identified. All 15 were two-member IOAs and 10 were interstate.

Operation

Formalization: extent of exchange coordination by an intermediary. Almost all of the exchanges directly associated with the IOA itself are coordinated by the project director or coordinator. These exchanges include steering committee and advisory board meetings, workshops, program planning, and evaluation. However, most of these IOAs support improvement efforts for which substantial components are carried out and coordinated separately within member organizations. For example, the Responsive Education Program involves classroom implementation of new content and teaching methods. The R&D agency member provides training, consultation, and evaluation of the district program. Responsibility for the daily operation of the program and most communications about the program rests with the district through the district project coordinator and staff developers.

Intensity: frequency of interaction among members. For about half of these IOAs, there is almost daily interaction, usually face to face, among at least some of the member organizations. These contacts may be among a variety of individuals from member organizations and do not necessarily include the official organizational representatives. For example, in Teacher Corps projects, there may be courses, seminars, and workshops which bring together various IHE faculty and teachers from the district. In MESA projects, there are daily contacts through teachers and students who use the IHE-MESA Center for tutoring sessions and workshops and who participate in field trips.

Reciprocity: directions of exchange. In terms of fiscal resources, the primary direction of exchange is from the external sponsoring agency to the member organizations rather than among members. In terms of other resources and the activities of the IOA, there are bilateral or multilateral directions of exchange. That is, although resource contributions and participation are not necessarily equal among members, the exchanges do not flow exclusively or even primarily from one member to other members.

Outputs

Results of the IOA: direct outputs to members and clients. For most of these IOAs (Responsive Education Programs, MESA, SPECTRA), the direct outputs have been training and other resources that have supported the implementation of a new school-level program within member organizations. For the others (Teacher Corps, PDPICs), the outputs are primarily staff development activities oriented to improvement of individuals within member organizations.

II. ENABLED ARRANGEMENTS

Enabled arrangements receive their primary sponsorship, incentives, and resources from an agency external to member organizations. These arrangements may support improvement efforts that are mandated (II.A), enabled (II.B.), or freestanding (II.C.). However, in this study no enabled arrangements supporting freestanding improvements (II.C.) were identified.

II.A. Enabled IOA-Mandated Improvement Effort

There are 32 arrangements in this, the largest subclass of IOAs. Sixteen support required special education improvement efforts; these are referred to as Special Education Consortia or Special Education Service Regions. Sixteen support required vocational/occupational improvement efforts; these IOAs are referred to as Regional Occupational Programs. For each set of improvement efforts, the mandate comes from both federal and state legislation and is administered by the CSDE. The enablement for the IOAs comes primarily through a State Master Plan for each of the improvement efforts. Each Master Plan was adopted by the by the State Board of Education and is administered by the CSDE.

The size of the IOAs ranges from two to 38 members. Six of the arrangements include school districts only; three include school districts, county offices, and community colleges; 23 include districts and county offices. All but one are intracounty arrangements. The single intercounty IOA covers two contiguous Bay Area counties and includes the county office in each and all but one of the school districts in both counties.

History

Circumstances that led to the IOA. As briefly noted above, the IOAs in this subclass are enabled primarily by the California Master Plans adopted by the State Board of Education and administered by the CSDE. For that reason it is the events and circumstances at the state level that provide the primary historical context for the development of the IOAs.

Special Education. In 1971, the California State Department of Education began intensive efforts to develop a comprehensive plan for special education that would "equalize opportunities for all children in need of special education service...[and would] correct two longstanding problems: (1) stigmatization by label; and (2) rigid categorical programming and funding, which imply that children must be grouped by handicap rather than educational need" (CSDE, 1974, p. iii). By 1971, the State Board of Education had established the development of such a plan as a critical priority. The plan itself evolved through 20 drafts prepared by CSDE staff and discussed, debated, and commented upon in numerous regional meetings attended by teachers, parents, school administrators, representatives of various public agencies, and handicapped persons. In addition, suggestions were solicited from the public in hearings sponsored by the Council for Exceptional Children and the State Commission on Special Education.

The Master Plan, adopted by the State Board of Education in January 1974, sets forth four major goals:

- Public education in California must seek out individuals with exceptional needs and provide them an education appropriate to their needs.
- Public education must work cooperatively with other public and private agencies to assure appropriate education for individuals with exceptional needs from the time of their identification.
- Public education must offer special assistance to exceptional individuals in a setting which promotes maximum interaction with the general school population and which is appropriate to the needs of both.
- The most important goal of special education is to provide individually tailored programs which reduce or eliminate the handicapping effects of disabilities on exceptional children. (CSDE, 1979a, p. 4)

In addition, the Master Plan presents guidelines for implementing the philosophy and goals, sets forth the responsibilities of the various types and levels of public education agencies, establishes the criteria and options for districts and county offices to develop comprehensive plans, and identifies the specific responsibilities of state, county, and local public education agencies under each option. Two of the three options enable interorganizational arrangements:

> - Any school district may develop its own comprehensive plan.
> - A combination of school districts may join with the office of the county superintendent of schools to develop a joint comprehensive plan.
> - Contiguous districts may join together to develop a joint comprehensive plan. When developed in this manner, the office of the county superintendent of schools must participate in the planning process to identify problems and needs which relate to the larger geographical area and to ensure that all individuals with exceptional needs are appropriately served. Contiguous counties may also develop a comprehensive plan. (CSDE, 1974, pp. 16-17)

Although many districts and district and county offices had previously shared or exchanged special education classes and resources through interdistrict attendance agreements, the options in the Master Plan provided the first opportunity to share the comprehensive services and resources necessary to meet the new requirements.

Regional Occupational Programs (ROPs).* As they are described in the California State Plan for Vocational Education (CSDE, 1972), the Regional Occupational Programs are vocational or technical training programs which are conducted in a variety of settings or physical facilities not necessarily situated in one single plant or site. The purpose of the ROP is to

> provide a means whereby vocational, technical, and occupation educational opportunities can be extended through a wider variety of specialized sources to serve a larger number of students than

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* There are also Regional Occupational Centers (ROCs) covered by this requirement. They differ from ROPs in that they are separate training facilities designed for vocational or technical training programs. They also may be conducted by means of an IOA. However, no fully constituted ROC was identified in the study area.

> can be provided adequately, efficiently, and economically by a single district. It is a further intent to provide high school students and graduates and out-of-school youths and adults, regardless of the geographical location of their residence in a county or participating region, with the opportunity to enroll in a vocational or technical training program. (CSDE, 1972, p. 103)

The emphasis of the program is on providing training in specialized skills that will ensure the immediate employability of the trainee in that skill upon completion of the training program. Moreover, the curriculum must include training in occupational areas that have been identified in local or regional job market surveys as having current and future needs for such skills. ROPs can be operated by a single unified or high school district, by a single county office of education, by a combination of several districts, or by a combination of several districts with one or more county offices. As with the requirements for special education programs, although cooperation between public education agencies and nonpublic agencies is necessary to carry out the program requirements, the mandate for providing the educational programs and services rests only with the public education agencies.

Context

General cooperative environment: emphasis/support for collaboration external to the IOA. For both improvement efforts, there are at least three sources which either directly or indirectly encourage collaboration in support of the improvement programs. There is the general influence of the CSDE's philosophy of collaboration. In addition each of the programs has a strong constituency base which generally supports mechanisms that will more effectively achieve the program goals. For special education, the constituency consists of parents and teachers of exceptional children, and civil rights groups. For the occupational programs, the constituency includes the businesses and industries whose needs for skilled employees are met by the training programs in their areas. Also, at the state level, there are interagency agreements between the CSDE and other agencies such as the State Department of Rehabilitation (for special education) and the State Department of Employment (for vocational education and regional occupational programs). These agreements are intended to provide the basis for similar agreements between agencies at the county and local levels.

Resource availability: number and types of resources external to member organizations. There are no external funds designated specifically for the operation of the IOAs. Instead the coordination costs are supported as indirect expenditures of the coordinating agency through the federal, state, and local program funds allocated to member agencies. However, both member agencies and the IOA have access to other resources such as technical assistance and consulting services from the CSDE, and individual consultants in IHEs. For special education IOAs, external resources also include those available through other public agencies and nonprofit education agencies which provide specialized services for exceptional children. Resources from these agencies usually are provided through a contract between the IOA and the external agency for the particular services provided to one or more students. In some instances, there also are memoranda of agreement for cooperation between these agencies and the IOA.

Similarly, the IOAs supporting Regional Occupational Programs frequently contract with businesses and industries to provide specialized training facilities and equipment, and in numerous instances, to provide personnel with specialized skills to teach courses.

Structure

Formalization: degree of official sanction or agreement given to the exchange by member organizations. For each of the improvement areas, the improvement efforts or program plans must be approved by the board of each member district, the county superintendent, and the CSDE. When the program is supported or implemented by means of an IOA, the agreement for the IOA is a basic part of the plan. Approval of the plan by each level of authority also represents approval of the IOA and agreement given to the exchange. In addition, there are interdistrict attendance agreements between the agencies in each IOA.

Intensity: size of resource investment required for membership. In these IOAs the resource investment is for the operation of the overall program, not for the IOA as a separate contribution. The size of each member's investment is the amount allocated by the state to each member according to a state formula on the basis of the programs and services rendered by the member in the program plan. Since the consortium or joint powers board actually operates classroom programs and services as well as providing support for member agencies, the annual overall cost can be extremely high. For example, a recent one-year budget for one six-member special education consortium was over $400,000; for one 16-member arrangement, over one million.

Reciprocity: extent of agreement about bases and conditions of exchange. For all the consortia identified in this subclass, formal mutual agreement is signified by the approval given by each member agency's board of education to the initial program plan and renewal applications. The plan specifies the bases and conditions of the IOA including structure, operation and decision-making procedures, and the features of the improvement program. Usually, procedures for mediating disagreements among members are also included. For the IOAs based on joint powers agreements, the boards must approve the agreement separately from the program plan.

Standardization: extent to which units and procedures for exchange are fixed. Several units and procedures of exchange are fixed by the requirements of the Master Plans and are subject to little, if any, negotiation or change by members of the IOA. For example, the amount of member allocations are determined by a state formula. Similarly, the units and procedures for interdistrict attendance agreements are set forth in the state Education Code. In addition, the Master Plans identify numerous responsibilities of each type of agency for developing a joint plan. Other items, such as the particular programs to be offered by the IOA itself and the governance procedures, are determined by the member agencies. In general, these items are fixed for a period specified either by the members in the agreement or by external requirements for review or renewal of the joint plans.

Types of coordinating mechanisms. There are two types of coordinating mechanisms in this subclass of IOA. Each is employed both in IOAs supporting special education improvement efforts and in IOAs supporting ROPs.

One type is a consortium arrangement in which member organizations formulate a consortium or interagency agreement which identifies the IOA's purpose, the responsibilities of each agency or type of agency, the decision-making procedures for the IOA, and the exchange conditions relative to implementation, administration, and operation of the consortium. One of the members, usually the county office, is designated as the coordinating agency or RLA which acts as the administrative and fiscal agent for the IOA.

A coordinating council or steering committee is the policy-making body. Member representatives are usually either the district and county superintendents or their assigned representatives. The coordinating council assumes overall management responsibility for the consortium activities as specified in annual plans. Examples of these responsibilities are: preparing and submitting an annual plan; monitoring all school programs and facilities for compliance with requirements; developing and administering a management information system which provides information necessary for member reports, program evaluation, state reports, and program budgeting; establishing required advisory committees; disseminating information about consortium activities to district personnel, staff, and community; assuring that appropriate reports are prepared and submitted; and providing staff development and inservice training for member agencies. The coordinating council is directly responsible to the district and county superintendents and to the district and county boards of education.

Most of the actual tasks are carried out by a consortium director who is responsible to the coordinating council. The director's position usually is a full-time one. In addition there usually are one or two other staff members (usually full-time also) with consortium-related roles. These personnel are most often located in the designated coordinating agency, but some may be located in one of the member organizations.

At least one and usually two advisory committees are required for the improvement effort and coordinated by the IOA. For special education there are a Citizens' Advisory Committee (CAC) and a Professional Development Advisory Committee (PDAC). Membership in the CAC is open to the public; the majority of members must be parents of handicapped children. Membership in the PDAC is open to certified staff; the majority must be teachers. For both committees application for membership is submitted to the coordinating council which appoints members from the list of applicants. The committees meet on a regular basis, the frequency (usually once a month) determined by the coordinating council. For the ROPs, there is curriculum advisory committee composed of representatives from regional businesses and industries. In addition there is a Regional Adult and Vocational Education Council which has the responsibility for verifying that ROP curriculum does not unnecessarily duplicate programs and services.

The other type of coordinating mechanism is established under a joint powers agreement among IOA members. In this type of arrangement, a joint powers board, composed of representatives of member districts, is designated as the coordinating agency for administrative, coordinative, and regionalized service functions, and one of the member agencies is designated as the fiscal agent for the arrangement. The total number of seats on the board and the assignment of seats is usually determined by a formula based on the enrollment figures of each member. Individual representatives are chosen by the boards of education of member agencies. The boards may choose a board member, the superintendent, or a director (special education or ROP director) as its representative. Each joint powers board member serves in a staggered term of office (usually three years).

As the responsible agency, the joint powers board (sometimes designated as the governance council) adopts all policy matters for jointly established and maintained programs (e.g., student eligibility guidelines and records, curriculum and program services, and fiscal matters such as allocation of instructional units, distribution of funds, and budgetary guidelines). In addition, the board selects and provides direction to the IOA director/coordinator, develops and approves evaluation plans, exercises authority to institute dismissal proceedings of IOA personnel, and establishes procedures for mediating disputes between member organizations and between members and the coordinating agency. The board, through the consortium director, is also responsible for negotiating contractual services provided for the IOA by nonmember agencies.

Under this type of agreement, the member boards of education and the superintendents have authority over programs operated by the member agency. In addition, superintendents are members of a committee which advises the IOA director concerning annual allocation of fiscal resources, development of operational procedures and regulations, establishment of priorities for programs and services, and the evaluation of programs and services. There may also be an advisory group composed of directors of the substantive programs (special education or ROP) in each member agency. This group advises the IOA director on matters such as the current status of the substantive program area, development of the projected budget, implementation of staff development programs for members, and other coordination activities assigned to the director.

The director is responsible to the governance council for coordinating the delivery of all joint programs and services, implementing all adopted policies, rules, and procedures, coordinating and monitoring all IOA fiscal resources, serving as the IOA representative at appropriate meetings and serving as liaison with the CSDE, hiring and supervising personnel for the jointly conducted programs, and coordinating meetings of the governance council and all advisory committees.

Degree of coupling. In these arrangements, there is a very strong coupling among the member agencies, because of the nature of the mandated improvement effort, the nature of the programs and services supported by the IOA, the several forms of agreement entered into by member agencies, and the several levels at which interaction occurs. Although members have several options about how the improvement efforts may be implemented, they have no option but to implement the required improvement effort. The programs and services included in the mandate involve the basic educational functions of the members--providing teachers, curriculum, physical facilities, support services, etc. The requirements themselves are such that few, if any, of the member agencies could meet them without participating in the arrangement.

In addition, members are linked by two or three forms of agreement. One is the initial agreement by member agencies, approved by their boards, to work together in developing and implementing the improvement effort. Another is the application or improvement effort plan which covers all members and which is formally approved by member boards prior to submission for approval by the CSDE. Included in the plan is the formal statement of agreement for the IOA. In addition, there are the interdistrict attendance agreements among the member agencies, which are authorized by the superintendents. In the case of joint powers boards, the agreement is a separate formal agreement entered into by the boards of member agencies.

In addition to these linkages at the level of the agency boards and superintendents which empower the arrangement, there are also linkages among boards and superintendents through their membership in the governing bodies of the IOAs and in the advisory committees, and among superintendents through their membership in one of the advisory committees. At other levels, there are linkages among the program directors of member agencies for carrying out the improvement activities, and among teachers and support staff both in their daily activities and in staff development programs provided by the IOA. There are also the linkages through the various advisory committees. All these linkages provide a multiplexity of ties among members within the IOA itself. In most instances, participants also share membership in at least one other IOA and many share two or more IOA memberships that support improvement efforts in other areas.

Operations

Formalization: extent of exchange coordination by an intermediary. In these IOAs, almost all formal exchanges among members are coordinated by the designated coordinating agency through the director or another staff member, or through the agency designated as the fiscal agent (when the fiscal agent is different from the designated coordinating agency as in the case of the joint powers agreement). In fact, the essential responsibilities of the director include such exchange coordination and cover most aspects of the improvement effort: for example, all joint programs and services including classes and staff development activities, fiscal resources, meetings of all or most of the governance and advisory committees, and preparation and submission of all reports and evaluations.

Intensity: frequency of interaction among members. Given the nature and scope of the improvement efforts supported by these IOAs, there is a very high frequency of member interaction. In most, there is daily interaction between the coordinating agency staff and many or all of the members. In addition, there often are weekly contacts among members through meetings of one or more of the various IOA committees, and/or staff development programs sponsored by the IOA. The contacts pertain to the administration of the program and, in the case of special education IOAs, to identification, assessment, placement, and instruction of individual students.

Reciprocity: directions of exchange. The directions of exchange are multilateral on a continuing basis. Not only do members share in the jointly provided programs and services of the IOA, they also exchange, through the interdistrict attendance agreements, at least some of the programs operated by members themselves.

The high degrees of formalization, intensity, and reciprocity also create a high awareness in members about the resources and services other members have available for the improvement effort with which the IOA is associated. However, this awareness appears to be confined primarily to member representatives to the IOA and those representatives who participate in IOA activities. That is, member representatives involved in special education are likely to be highly aware of the special education activities, services, and resources of other special education consortium members but are unlikely to be aware of other member agency activities in areas such as the Regional Occupational Program, the Consolidated Application Program, etc.

Outputs

Results of the IOA: direct outputs to members and clients. Direct outputs to members include the implementation and coordination of all jointly sponsored programs, services, and activities, which in themselves are not only required by the improvement effort mandate but are also basic and essential functions of the member agencies. In addition, members not only are in compliance with the mandate, they also have available a larger number and broader range of services and programs for the students in their respective districts.

II.B. Enabled IOA-Enabled Improvement Effort

The 12 IOAs in this subcategory support one of three externally enabled improvement efforts. Five consortia are associated with the state-sponsored California School Improvement Program (CSIP). Two support state-sponsored School Resource Centers. Five are part of federally funded Teacher Centers.

Six of the 12 arrangements are intercounty. The number of IOA members ranges from two to 44. School districts participate in all of the IOAs, county offices in five, IHEs in five, and other educational organizations in three. School districts act as the coordinating agency for seven of the 12 arrangements, and county offices for five IOAs. There are seven different organizational combinations: school districts only (five IOAs); school districts and county offices (two IOAs); districts and IHEs (one IOA); districts, county offices, and IHEs (two IOAs); districts, county offices, and other educational organizations (one IOA); districts, IHEs, and other educational organizations (one IOA); districts, county offices, IHEs, and other educational organizations (one IOA).

History

Circumstances that led to the IOA. As background for descriptions of supporting IOAs, brief descriptions of the history, purpose, and collaboration option are given for each of the three improvement programs.

California School Improvement Program (CSIP). The program was enacted by the California legislature (Assembly Bill 65) in 1977 as part of a comprehensive school finance bill covering grades K-12. It represents an extension of the Early Childhood Education Act of 1972 (ECE), incorporates many recommendations of the CSDE's Task Force on Reform in Secondary Education (1976), and meets the requirements of the Serrano decision on financing public education.

The bill establishes a process and a framework for the initiation and refinement of ongoing improvement program planning, implementation, monitoring, evaluation, and modification at the school site level. Although the process is defined at the state level, responsibility and authority for the substance of the program rest with school site councils and staff and with district administrators and governing boards. This emphasis is intended to recognize the diversity of district needs and the contexts in which they occur. By 1980, almost half of the state's 7,471 school sites and about 75 percent of the districts were participating in CSIP. Participating schools receive one-year planning grants and are eligible to receive implementation funds as long as funds are made available in the annual state budget.

From the outset of the program, the CSDE has encouraged but not required formal collaboration among state, county, and local education agencies to assist schools and districts by:

1. Disseminating accurate and timely information on the expectations of this legislation to the individuals who will participate in school site planning.
2. Assisting with the development of school site plans and providing quality review and critique before implementation.
3. Providing specialized assistance to meet school site needs.
4. Preparing schools for conducting and feeding back the results of on-site program reviews which determine the degree to which plans are implemented and their effectiveness in improving educational programs. (CSDE, 1978a, p.9)

Moreover, AB 65 specifically allows two or more districts to cooperate in conducting program reviews. By the fall of 1980, there were 20 formal CSIP consortia (including the five in this study), each of which received funds and other resources from the CSDE in addition to the CSIP grants awarded to each corsortium member. In this study, the CSIP consortia are the only IOAs identified that receive separate resource support in addition to the program improvement funds awarded to member organizations. The nature and extent of these resources are described in the context descriptions.

School Resource Centers. These centers were authorized by the state legislature in 1977 (Assembly Bill 551) to serve as "staff development delivery systems distributed throughout the state which respond to the expressed needs of client schools sponsoring school improvement programs (AB 65/1977) and local staff development programs (AB 551/ Article I)" (CSDE, 1979d, p. 1). One major purpose of AB 551 programs, and consequently of the School Resource Centers, is to promote client ownership by allowing clients (primarily teachers) to identify their own needs and to decide how those needs can be met. In an effort to fulfill this purpose, the majority of each center's policy board membership is composed of classroom teachers. Another major purpose of the centers is to improve "the capacities of county office and school district personnel for providing for the needs of students and for conducting their own staff development programs" (CSDE, 1979d, p. 1).

Authorizing legislation specifically states that centers may be developed and supported cooperatively by some combination of districts, county offices, and IHEs. Five of the six centers that exist statewide involve collaborative arrangements.

Teacher Centers. This federally sponsored program was originally authorized under the Higher Education Act of 1965 and amended in the Education Amendments Act of 1976 (PL 94-482). The legislation was actively supported by teachers, primarily through their professional organizations. Some purposes of the Teacher Centers Program are: to provide inservice and staff development programs that respond to needs defined by teachers themselves; to take advantage of teachers' expertise in developing and carrying out staff development activities; and to provide increased opportunities and resources for teachers to renew their knowledge and skills and prepare for newly emerging roles and requirements.

Federal funds are awarded on the basis of competitive application from local schools, districts, intermediate service agencies, or institutions of higher education. Each center is governed by a local policy board which, by law, must contain a majority of classroom teachers.

Context

General cooperative environment: emphasis/support for collaboration external to the IOA. For CSIP consortia, major external emphasis on collaboration comes from the CSDE which has encouraged the notion of a school improvement network associated with CSIP. As one means of providing direct assistance to consortia and also of focusing attention on collaboration, the CSDE established a Consortia Support Service Unit in early 1980. For School Resource Centers and Teacher Centers, external interest comes from a strong quasiformal statewide network of individuals who have staff development responsibilities in their own organizations, and from an active Office of Staff Development in the CSDE. Although primary attention of both groups is focused on improvement efforts, they give considerable support to collaborative aspects of the programs. In addition, the concept and practice of Teacher Centers is strongly supported by many professional teacher organizations whether or not the organizations participate as members of Teacher Center IOAs.

Resource availability: number and types of resources external to member organizations. During the 1979-80 school year, CSIP consortia received CSDE funds equivalent to $50 per school that was receiving funds from AB 65, ESEA Title I, and the State Compensatory Education Program. In addition, they were awarded $400 for each secondary school scheduled to undergo a review of its school improvement program. The CSDE also provides consultant and technical assistance services through the Consortia Support Unit and numerous publications related to both the CSIP process and collaboration. Training for and coordination of the program review process also is provided by the department.

For Teacher Centers and School Resource Centers, the major external resources are awards from respective funding agencies. In addition, the National Institute of Education supports an information and resource networking program, Teachers' Centers Exchange, based in a Bay Area R&D agency.

Structure

Formalization: degree of official agreement given to the exchange by member organizations. All these arrangements must have the signatory approval or formal endorsement of the chief executive officer and most include approval by the member governing bodies. CSIP consortia agreements are developed by member representatives who serve on the steering committee with input from each member and assistance, as requested, from the CSDE, county office of education, and/or other established consortia. The agreement primarily describes planned consortium activities. If the consortium plans to conduct official program reviews, the agreement also must meet requirements of the California Administrative Code, Title 5, Sections 4070 and 4071. For example, review instruments and procedures must be the same as those used by the CSDE; districts must establish an agreement approved by each board that specifies procedures for conducting, monitoring, and evaluating the review process; and the agreement must describe how costs of the review will be covered (CSDE, 1980). The consortium agreement also serves as a legal contract between the consortium members and the CSDE.

Jointly submitted proposals usually serve as the agreement mechanism for Teacher Center and School Resource Center IOAs.

Intensity: size of resource investment required for membership. A major resource investment in CSIP consortia is staff time to participate in regular operations and activities of the IOA. Members are encouraged to support these costs with centralized service funds or with funds allocated by schools for staff development. Other resources invested can include meeting space, clerical support, and materials.

External funds for Teacher Centers and School Resource Centers usually cover all or most of staff salaries, and at least some materials, consultant fees, and release time. The coordinating agency often provides office and center space and utilities. Other members provide release time for policy board members, workshop and conference materials, fees, and space.

Reciprocity: extent of agreement about bases and conditions of exchange. For all these arrangements, the bases and conditions of exchange are negotiated as part of the agreement or proposal. In most cases, the responsibilities of each agency or each type of agency are spelled out in some details in those documents. Subsequent disagreements or desired changes are worked out by the steering committee or policy board. Substantial changes can be reflected in addenda to CSIP consortia agreements or in revised work scopes for Teacher Centers and School Resource Centers.

Types of coordinating mechanisms. CSIP consortia are governed by a steering committee composed of the CSIP project directors/coordinators from each organization. This group is responsible for IOA decisions with advisory input from School Site Councils and District Advisory Councils. One of the steering committee members is designated as contact person with the CSDE and also usually serves as the coordinator for consortium meetings, activities, and communications. In most of the consortia, the same individual serves as coordinator from year to year; one consortium rotates this role among members. In either case, the role itself is an additional part-time responsibility.

The coordinating mechanisms for Teacher Centers and School Resource Centers are policy boards, of which the majority of members are classroom teachers. Policy board members are selected according to procedures established in policy board bylaws and/or in accordance with guidelines provided by the sponsoring agency. The policy board is responsible for the direction of the center and for hiring the coordinator/project director. The coordinator is responsible for administrative and program matters, and for directing other center staff members. The coordinator usually is a full-time position, and in larger centers there also are two or three other staff.

Degree of coupling. In all these arrangements coupling occurs at multiple levels. Members of CSIP consortia have linkages at the district level through steering committee members, District Advisory Councils, and other district staff who participate in consortium-sponsored activities. Additionally, there are couplings among CSIP schools in participating districts through staff involvement in training and review activities. There are also couplings among School Site Councils whose members participate in planning and training activities.

Coupling among Teacher Center and School Resource Center members occurs through policy board representations, workshops, and conferences. In addition, the centers themselves provide opportunities for a variety of contacts among teachers who use the information and consulting resources at the center facilities.

For most of these consortia, member organizations have formal connections with at least one or two fellow members in at least one other IOA, such as a special education consortium.

Operations

Formalization: extent of exchange coordination by an intermediary. In most of these IOAs, a major portion of communication and information exchange, meetings, workshops, etc. are coordinated by the project director or contact person. However, in CSIP consortia coordination responsibilities may be shared among members as a way to accommodate the part-time status of the coordinator's role. In Teacher Centers and School Resource Centers, some forms of exchanges (e.g., those related to policy board meetings and decisions) may be coordinated by other member representatives. In addition, the nature and purpose of centers is such that many exchanges of information and other resources will be conducted by individual participants rather than through designated coordinators or other staff.

Intensity: frequency of interaction among members. Formal meetings of IOA governing bodies usually occur once a month. However, for most of these arrangements, there are numerous forms of more frequent interaction. CSIP consortia steering committee members may meet more often for the purposes of reviewing plans and program review documents, and conducting or participating in training sessions and workshops. They also may consult individually with CSIP schools in other member districts for similar purposes as well as consulting frequently with other steering committee members.

One purpose of Teacher Centers and School Resource Centers is to provide sharing of information and ideas. Most provide formal exchange opportunities on a weekly or biweekly basis through short- and long-term workshops, seminars, or on-site inservice training sessions. These are in addition to individualized activities, ad hoc sessions, and study groups which take place daily at the centers.

Outputs

Results of the IOA: direct outputs to members and clients. For the IOAs themselves, outputs are represented by goods and services such as workshops, training programs, program reviews, and products such as newsletters, handbooks, and curriculum guides. For CSIP consortia members, the results can include development of an approved plan, a successful program review, and increased staff skills (e.g., planning, evaluation) through participation in workshops and training sessions. For organizational members of Teacher Centers and School Resource Centers, results may include increased communication between faculty and administration. For individuals in member organizations, results may include increased access to information resources, consultation on classroom issues and questions, increased communication with teachers in other schools and districts, and additional graduate or district credits for participation in programs and workshops.

III. FREESTANDING ARRANGEMENTS

Freestanding arrangements are established, maintained, and supported primarily or solely by member organizations. The arrangements may support mandated improvement efforts (III.A.), enabled improvement efforts (III.B.), or freestanding improvement efforts (III.C.).

III. A. Freestanding IOA-Mandated Improvement Effort

There are four arrangements in this subclass, all of which are associated with proficiency assessment requirements established by the California legislature in 1976. The number of members ranges from five to 28, and the membership of each is composed of a county office and school districts. All four are intracounty arrangements, and three are located in the same county.

History

Circumstances that led to the IOA. Proficiency testing requirements were first established by the California legislature in 1976 under

Assembly Bill 3408 and were amended slightly in 1977 under Assembly Bill 65, which also authorized the California School Improvement Program. The mandate requires that each California school district must establish performance standards and develop tests to measure student proficiency in reading, writing, and math. The law also requires community involvement in setting the basic standards. Involvement must include parents representative of the district's socioeconomic composition, teachers, counselors, school administrators, and, in the case of secondary districts, students. Follow-up legislation (AB 801) further specifies that separate passing scores must be set for each of the three general areas to be tested. Students must be tested at least once between grades 4 through 6, once between grades 7 through 9, and twice in grades 10 and 11.

Under the law, districts are allowed the option of setting special standards for exceptional students. The differential standards must be included in the student's individual education program.

Beginning with the 1980-81 school year, high schools must begin withholding diplomas from 1981 seniors who do not meet the proficiency standards set by their districts. A student who fails the proficiency tests must be invited, along with his/her parents or guardians, to meet with school personnel to review the student's situation and to learn what plans the school has to provide remedial instruction, also required by the law, to assist the student in mastering the required basic skills.

In addition, the law prohibits the CSDE from performing a regulatory role and restricts it to providing local districts with information and technical assistance in the form of a framework for assessing student proficiency.

Three of the four arrangements supporting the proficiency assessment efforts were established almost immediately after passage of the 1976 legislation. The fourth was established in 1979 to support member efforts to exercise the special education options allowed by the law. In general, the formal arrangements were initiated by member districts to identify and share the extensive resources needed by each to comply with the mandate. In particular, districts were interested in acquiring and sharing expertise resources which are not commonly found in district staffs. In addition, they believed that developing common models of standards, tests, procedures, and policies would provide each with a strong legal base in case of future court challenges to the requirements and procedures adopted by individual members. The county offices were asked to assume the role of the coordinating agency and to provide leadership in organizing the consortia.

Context

General cooperative environment: emphasis/support for collaboration external to the IOA. In addition to the CSDE's general encouragement for collaboration and the resources described in the following paragraphs, the collaborative efforts of these IOAs have been indirectly supported by the Greater Bay Area County Superintendents' Council. This group has sponsored area-wide workshops on proficiency assessment issues and has worked to identify resource sources for council members and their respective districts. In addition, there has been a general sharing of information, expertise, and experience between several non-IOA county offices and these IOAs.

Resource availability: number and types of resources external to member organizations. In these four arrangements, all of the fiscal resources are provided by the member agencies. Resources widely available from sources external to the IOA itself are primarily the information and technical assistance provided by the CSDE. Included in CSDE resources are a proficiency assessment newsletter, a clearinghouse for materials and information located in the state department, a series of resource and technical assistance guides, and a series of conferences and training workshops. In addition, the consortia have drawn on consulting resources in proficiency assessment and test development available through research and development agencies and IHEs located in the area. Also, the 13 county offices of education in the study area have jointly sponsored workshops on developing assessment materials.

Structure

Formalization: degree of official agreement given to the exchange by members. In this subclass each IOA is based on an interagency agreement between the coordinating agency and each IOA member. The agreement sets forth the responsibilities of each party, the duration of the agreement, and the amount of the member's contribution to the IOA during the term of the agreement. The member agencies' superintendents must approve the initial agreement and each renewal, which is usually annual.

Intensity: size of resource investment required for membership. The size and scope of the tasks to be accomplished by the IOA are reflected in the rather sizable initial contributions required and the terms set forth for agencies that wish to join at a later date. The amounts are decided by the member agencies through the IOA coordinating committee.

For example, in one 12-member IOA, the first year's contribution from each of 11 districts was $2,000. The coordinating agency (the county office) matched the total district member amount of $22,000. In the second year, the district contribution was $5,000 each, for a total of $55,000, and again the coordinating agency matched the district member total. In succeeding years, the annual district member contribution has been about $500 each, and the coordinating agency has contributed about $50,000 each year.

This IOA established a policy that any agency that wants to join at a later time must contribute the total amount that an original district member would have made from the IOA's inception. This policy was developed at the outset of the IOA on the belief that all members must share equally in the costs as well as the benefits of the consortium.

In addition to the fiscal contribution, member agencies contribute the staff time for representatives to participate in meetings and workshops, and in-kind services such as facilities for meetings. The coordinating agency also contributes the coordinator's time and some support personnel time.

Reciprocity: extent of agreement about bases and conditions of exchange. The bases and conditions of exchange are determined by member oranizations through their representation on the coordinating committee. Under this circumstance, there is general agreement by all parties about the exchange and the responsibilities of various members.

Standardization: extent to which units and procedures for exchange are fixed. The units and procedures for exchange are fixed to the extent that they are generally spelled out in the interagency agreement. Since the agreements are usually reviewed and renewed on an annual basis, the terms of the agreements may be revised at the time of review. In addition, it seems possible for the coordinating committee, as the policy-making group, to revise the agreement at any time. However, any new agreement would require the final approval of superintendents in member agencies.

Types of coordinating mechanisms. All four of these arrangements have essentially the same type of coordinating mechanism. In each, the county office is the designated coordinating agency responsible for administering the IOA budget and joint activities and services. One county office staff member is assigned to the coordinator role on a part-time basis and one or more other county office personnel also assist with coordination activities and/or participate in IOA activities. A coordinating committee, composed of one representative from each member district, makes all decisions about the IOA budget, activities, and responsibilities of member agencies.

In three of the arrangements, the representatives are curriculum directors or coordinators. In the fourth, special education administrators represent their agencies.

Although the coordinating committee has worked as a full group to develop many of the proficiency assessment models and products, most of the work is done by smaller task forces that make recommendations to the coordinating committee. Task force membership primarily includes coordinating committee representatives but other member personnel also serve on these groups. In many instances, external consultants work with the task force to develop products such as test items and performance indicators. In other instances, consultants are hired to do a complete task such as developing a manual on evaluating writing skills. The decision to use consultants in either capacity rests with the coordinating committee. The contract is negotiated and administered by the coordinator on behalf of the IOA.

Degree of coupling. Linkages among IOA members occur at three levels: at the superintendent level for the formal interagency agreement; at the level of the coordinating committee representatives and task force members; and at the level of school personnel who participate in some of the workshops. The strongest ties are among the curriculum administrators who serve on the coordinating committee and member representatives who serve on the task force.

In each of these four arrangements, member organizations have numerous ties through other IOAs. For example, all five agencies in one IOA share membership in three other IOAs. In one of the 12-member arrangements, all 12 agencies also participate together in four other arrangements (which also include other agencies). In both examples, most of the agencies are represented in each IOA by a different individual and/or a different subunit.

Operations

Formalization: extent of exchange coordination by an intermediary. The consortium coordinator facilitates most of the IOA activities. Coordination responsibilities include coordinating all or most of the committee and task force meetings, making most of the arrangements for workshops and conferences, and disseminating information and materials produced by the consortium to member agencies.

Intensity: frequency of interaction among members. The nature of the activities supported by the IOA and the deadlines for implementing the proficiency standards and tests dictated a regular and very high degree of interaction, particularly during the first two or three years of the arrangement. Taken together, the coordinating committee and task force meetings provided for weekly interaction for the purpose of working on various products to be developed. The workshops and conferences provided opportunities for periodic contacts among a broader range of member personnel. In addition, the coordinator has almost daily contact with one or more of the member representatives to exchange or provide information about some aspect of IOA work.

Reciprocity: directions of exchange. In these IOAs, the member districts contribute equal dollar amounts, share the decision-making responsibilities and actual development tasks, and share equally in the use and benefits of products, models, and activities of the IOA.

Outputs

Results of the IOA: direct outputs to members and clients. The direct outputs to IOA members include the coordination of most IOA-related tasks and activities and a series of products that are available for each member to use in its model form or to adapt. The products include model packages for proficiency assessment standards, instruments, and procedures; model board of education policies and procedures for setting proficiency standards; and test item banks maintained by the coordinating agency. Member personnel have received training in standard setting and test administration. Perhaps the most important outcome is that member districts are able to establish and maintain compliance with the mandate. In addition, the jointly developed models and procedures provide a common base of support in the event of legal challenges to individual districts' standards and tests.

III.B. Freestanding IOA-Enabled Improvement Effort

The six collaborative improvement efforts in this subcategory receive all or most of their resource support from federal grant or contract funds. A single Bay Area R&D agency participates in five of the arrangements, with one subunit of that organization participating in three of the five IOAs.

Only one of the six is an intracounty IOA; one is intercounty; and four are interstate. The size of the IOAs ranges from two to nine members with five combinations of organizations. Three of the arrangements involve a single R&D agency with a state department of education. One includes multiple R&D agencies and one an IHE. One includes school districts and other educational agencies. One is composed of multiple institutions of higher education and R&D agencies and one other educational agency. For five of the IOAs, an R&D agency serves as the coordinating agency. The remaining IOA is coordinated by a school district.

History

Circumstances that led to the IOA. All of these IOAs were initiated by one or more member organizations. Three were formed to respond to external requests for proposals (RFPs): one to conduct research on bilingual education instruction; one to provide technical assistance for basic skills improvement projects; one to design and implement a career planning inventory system that will be uniformly used by member organizations in student career counseling and classroom programs. The other three IOAs were formed in order to carry out some aspects of a broadly defined program conducted by an R&D agency aimed at supporting improvement-oriented dissemination and utilization efforts in a three-state region. Although all three arrangements share a common focus on staff development in general, the particulars of each improvement effort and IOA were based on the needs and resources of participants in each arrangement. One focuses on training school and district personnel to plan and implement improved reading programs. One focuses on principal staff development for instructional leadership. One focuses on administrative staff development for competency assessment and instructional leadership.

Context

General cooperative environment: emphasis/support for collaboration external to the IOA. For most of these arrangements, the primary impetus for collaboration comes from the member organizations. Four are interstate IOAs and thus are subject to a different and larger environment than the collaborative influences in California. In particular, members in the two largest arrangements (basic skills and bilingual) are usually in competition with one another for grants and contracts similar to those supporting the present IOA. Moreover, they could have been in competition for the present contracts.

Resource availability: number and types of resources external to member organizations. For three IOAs, most or all of the fiscal resources come from the external sponsor. In three they are allocated to member agencies on the basis of their particular tasks and level of effort (e.g., number of staff and length of time required to complete the tasks). For the other three, the external resources support a larger programmatic effort in the R&D agency member and cover all or most of that agency's IOA contributions. For the other member in each

IOA (SDEs), there are few, if any, direct fiscal contributions to the arrangement. However, other resources such as release time and meeting space are contributed.

Structure

Formalization: degree of official agreement given to the exchange by member organizations. Three of the arrangements require the authorization of the chief executive officer for each member (basic skills, bilingual, career planning). These arrangements involve jointly submitted proposals which represent a legal contract among members and between members as a group and the sponsoring agency. The arrangements are also reflected as line items in each member's organizational budget. Agreements for the other three represent official and formal member commitments, but are not legal contracts and are not reflected in the organizational budgets of members.

Intensity: size of resource investment required for membership. This property is covered under resource availability.

Reciprocity: extent of agreement about bases and conditions of exchange. For the three arrangements based on requests for proposals, the bases and conditions are largely defined by the nature of the RFP and the tasks to be conducted. Basic agreement about which organization conducts and/or participates in each task and how the task will be conducted must be reached in order to submit a proposal and is represented by participation in the project.

In the other arrangements, the general level of agreement is negotiated at the outset of each project. However, some renegotiations occur periodically about the overall scope of the projects and about the focus of activities to be conducted.

Standardization: extent to which units and procedures for exchange are fixed. For arrangements based on RPFs, all major units and procedures are fixed by the RFP itself and/or by the proposal. Changes in any of these major items would require approval by the external sponsor. For the other IOAs, most units and procedures are flexible and can be adjusted or changed upon member agreement without external approval.

Types of coordinating mechanisms. All but one IOA have some form of steering committee which is responsible for policy decisions. In addition, all have a designated fiscal agency which administers external funds and provides primary liaison with the external sponsor. There is also a project director who is responsible for general project administration. For these IOAs, there are also one or more advisory groups.

Degree of coupling. The contractual nature of these arrangements provides the strongest tie among members of three IOAs. Although in these arrangements it is possible that any one of the members could have conducted the project alone, once the IOA was formed and the contract awarded, external resources to carry out the project became dependent in large measure on the continued participation of most, if not all, members. For the other three, external resources for the particular improvement project do not depend on the continuation of the IOA. At least some of the activities could be conducted by either member alone or without a formal supporting arrangement.

In all six, most members have several ties with some or most other members. However, although the ties may overlap in time, the formal IOAs tend to be periodic rather than regular, and most are for fixed terms rather than for sustained long-term relationships.

Operations

Formalization: extent of exchange coordination by an intermediary. Most steering committee meetings and meetings of advisory groups are arranged and conducted by the coordinating agency. Task force meetings may be coordinated by another member. In addition, many workshops and technical assistance services for client groups are coordinated and conducted by another member. However, there are many formal exchanges of information and consultation between members that are not coordinated by any other intermediary agent or agency.

Intensity: frequency of interaction among members. Due to the interstate nature of five IOAs, face-to-face contacts among most of the IOA members are limited primarily to regular steering committee meetings usually held no more than once a month. However, there may be additional meetings among subgroups of member organizations. Other forms of communication, particularly phone calls, provide the primary means of interaction. Through these forms, there is regular, often weekly communication among members, especially between the coordinating agency and other members.

Reciprocity: directions of exchange. Exchange usually flows fairly evenly among members, primarily in the form of information and expertise needed to accomplish their joint tasks. In addition, five of the arrangements provide some type of service to a client group or groups outside the member organizations. In these instances, there is an exchange flow from one or more members to the clients.

Outputs

Results of the IOA: direct outputs to members and clients. In all six arrangements, there are tangible products such as newsletters, handbooks, or technical reports. In addition, there are services, such as administration of fiscal resources, workshops, consultation about project design, and implementation and evaluation assistance.

III.C. Freestanding IOA-Freestanding Improvement Effort.

In these 14 IOAs, member organizations provide most or all of the resources for both the improvement effort and the collaborative arrangement. Six of the 14 support some form of staff development effort. Two each support health education projects and career education projects. Each of the four remaining arrangements support different improvement efforts: an environmental project; dissemination of improvement resources information; statewide curriculum development; and statewide educational planning. Membership size ranges from three to 59 organizations.

Five of the arrangements are intercounty. County offices participate in and serve as coordinating agencies for all 14. In two of these IOAs, school districts are the only other participants. In one there are only county offices. In two, the SDE also participates, and in one the other organizations are IHEs. Also in two, the other members are other educational organizations. Non-educational organizations are participants in still two others. One arrangement has school districts and non-educational agencies in addition to the county office. One has school districts, IHEs, and non-educational organizations with the county office.

History

Cicumstances that led to the IOA. The origin of all these arrangements grew primarily out of informal discussions among a few individuals in two or three of the organizations. In most instances, there were several months to a year or more of informal interaction mostly involving increasingly regular and frequent meetings and information exchange and a few jointly sponsored activities (e.g., a workshop). As communications and activities increased, additional organizations were invited to participate and to share the costs of activities. Eventually, members agreed that a formal arrangement could provide a more stable resource base for shared activities and that regularly shared activities and resources would reduce unnecessary duplication and costs.

Context

General cooperative environment: emphasis/support for collaboration external to the IOA. Most of the educational organizations also participate in some other externally required or enabled collaborative arrangement, especially in ones sponsored by the CSDE. In this regard, these IOAs are influenced by the CSDE emphasis on collaboration. However, there is no external emphasis specifically for these projects.

Resource availability: number and types of resources external to member organizations. Only three of these IOAs have successfully sought out external fiscal resources. These were grants awarded for proposals to carry out specific projects--not for regular operation of the collaborative effort as a whole.

Structure

Formalization: degree of official agreement given to the exchange by member organizations. Although all 14 IOAs have some form of formal interagency agreement and are officially authorized by the chief executive officer, none of the agreements is considered a legal contract, and none requires approval by the members' governing boards.

Intensity: size of resource investment required for membership. The direct fiscal contribution for most of the arrangements ranges from $500 to $1,000, which is a very small amount for most members. However, additional resources such as release time for the staff development IOA activities increase the contribution. In a few instances, there are substantial printing and mailing costs which are contributed by members as in-kind services.

Reciprocity: extent of agreement about bases and conditions of exchange. Initial mutual agreement is signified by approval of the agreement itself. For 10 of these IOAs, the agreements must be renewed each year and are subject to renegotiation at the renewal period. There has been little turnover in membership for any of the arrangements. In addition, all but one have continued for at least three years and two have continued for more than 20 years. Continued participation suggests general agreement.

Standardization: extent to which units and procedures for exchange are fixed. In general, the units and procedures appear to be flexible. There are no external requirements which limit negotiations among members, and the formal agreements are open to reconsideration at each renewal period.

Types of coordinating mechanisms. A steering committee serves as the decision-making device for each IOA. In addition, there is one agency designated to coordinate most activities and to administer the budget. There are no advisory committees for these arrangements. The coordinating agent's IOA responsibilities are part-time.

Degree of coupling. In several ways, these IOA couplings appear to be more flexible or less forceful than others in this study. For example, they are entirely voluntary and are without substantial resource contributions or requirements. A member may withdraw at any time without losing major resources or risking non-compliance with a mandate or legal contract. In addition, the improvement efforts themselves, although valuable, are not essential to the functioning of member agencies.

In other ways, they are similar to the other IOAs. There are multiple levels of linkage in each. In all, there are at least two: the organizational level for the formal agreement; and the subunit level for most interactions. In at least half, there also are interactions among other subunits and individuals through workshops and technical assistance, etc. In addition, virtually all the educational organizations have other IOA ties with some other member organizations.

Operations

Formalization: extent of exchange coordination by an intermediary. Most IOA meetings and interactions are administered by an intermediary. However, in some instances, such as frequent large workshops or publications development, coordination tasks are shared by the designated agency and another member.

Intensity: frequency of interaction among members. About half of the IOAs involve some form of general member interaction on a weekly basis. These instances tend to include IOAs that provide workshops and on-site staff development programs or consultation. In the other half, face-to-face interactions among most members generally occur about once a month through committee meetings. There are also periodic ad hoc task force meetings in these IOAs.

Reciprocity: directions of exchange. In these arrangements, most of the exchanges occur mutually among members, especially in the in-kind contributions. For example, provision of meeting and workshop sites and responsibility for acquisition or production of materials is shared. Members may also provide some technical assistance and consultation to one another for program design and implementation (e.g., inservice programs).

Outputs

Results of the IOA: direct outputs to members and clients. Direct product outputs include items such as newsletters, resource guides, curriculum guides, and instructional resource materials. Services include curriculum development and planning, implementation assistance, and inservice training activities.

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